Precautions on Using Flash Development Toolkit

READ this document before using Flash Development Toolkit (hereafter referred to as the FDT) V.4.09 Release 03.
KEEP the document handy for future reference.

1. Action when the FDT Sends "Timeout error"

(1) When you use the FDT under the following conditions, you may get "Timeout error".

- Using low performance and small RAM PC
- Using upload function
- Using verify function after programming the flash data
- At the beginning of adjustment of baud rate

Lower the baud rate when you get this error.

(2) When you get a message " Error No 15068: Error while reading timed response" at the connection to a device, lower the baud rate.

2. Selection of 1200-bps Communication

FDT supports the following devices with 1200-bps communication speed.
Do not select 1200-bps communication speed with other devices.

(1) H8

38002F, 38004F, 38024F, 38102F, 38104F, 38124F, 38324F, 38327F, 38344F, 38347F,
38424F, 38427F, 38444F, 38447F, 38522F, 38524F, 38534F, 38537F, 38702F, 38704F

3. Setting of Frequency with H8S/2172F Device

In the H8S/2172F device, the operating frequency is doubled by the PLL circuit, but "2" cannot be chosen from the ratio conditions in FDT.
So set the value of operating frequency that was doubled by the PLL circuit as the input frequency conditions in FDT.

4. Readback Verify

A verification error may occur when the programming is not successfully done due to an electrostatic damage or other factors. In this case, FDT might abend.

5. AutoUpdate Tool

FDT V.4.09 Release 03 does not support the AutoUpdate.

6. Blank Check of R8C/2x Devices

(1) Working Samples

FDT does not support a blank check for working samples of the R8C/2x devices. If you attempt to use this function, the message "Device is not blank" will appear.

(2) Mass-Produced Devices

When 0 has been written to bit 0 of the OFS register (at 0FFFFh), performing a blank check prevents further communications. Make sure that bit 0 of the OFS register is 1 before you perform a blank check.

Applicable devices:
R5F21206, R5F21207, R5F21208, R5F2120A, R5F2120C, R5F21216, R5F21217, R5F21218,
R5F2121A, R5F2121C, R5F21226, R5F21227, R5F21228, R5F2122A, R5F2122C, R5F21236,
R5F21237, R5F21238, R5F2123A, R5F2123C, R5F21247, R5F21248, R5F21257, R5F21258,
R5F21262, R5F21264, R5F21265, R5F21266, R5F21272, R5F21274, R5F21275, R5F21276,
R5F21282, R5F21284, R5F21286, R5F21292, R5F21294, R5F21296, R5F212A7, R5F212A8,
R5F212AA, R5F212AC, R5F212B7, R5F212B8, R5F212BA, R5F212BC, R5F212C7, R5F212C8,

R5F212CA, R5F212CC, R5F212D7, R5F212D8, R5F212DA, R5F212DC, R5F212E2, R5F212E4,
R5F212F2, R5F212F4, R5F212G4, R5F212G5, R5F212G6, R5F212H1, R5F212H2, R5F212J0,
R5F212J1, R5F212K2, R5F212K4, R5F212L2, R5F212L4

7. Device Protection Option when an M16C/30P One-Time Flash Device is in Use

When you have selected "Automatic" or "Interactive", FDT operates in the same way as when "None" is selected.

8. CRC Verification of R32C Devices

If you attempt to program a device that is not blank, a CRC verification error may occur. In such cases, perform "Readback Verification" to verify that the data was programmed successfully.

9. Communications Speed for the R8C/3x, R8C/Lx and R8C/Mx Series

While an R8C/3x or R8C/Lx series device is connected to the FDT via an E8a, communication at 125 kbps is not possible.

10. Clock Input in Cases Where the FDT is Connected via RS-232C

Some devices only support external clock sources for the FDT connected via RS-232C. If you are using any of the devices given below, only use external clock sources.

Device groups in the M16C family:
56, 56D, 57, 5L, 5LD, 5M, 63, 64A, 64C, 65, 65B, 65C, 6B and 6C

11. Installing USB Drivers

If this application does not correctly recognize any of the supported USB drivers, follow the procedure below to manually install the drivers.

(1) Double-click on "dpinst.exe" in the following installation directory.
Note: "dpinst.exe" is a driver-package installation utility provided by Microsoft Corporation.
(a) When the FDT is connected via an E8a:
- 32-bit OS
  C:\Program Files\Renesas\FDT4.xx\Drivers\for_32bit\E8a_USB
- 64-bit OS
  C:\Program Files\Renesas\FDT4.xx\Drivers\for_64bit\Hmse_USB

(b) When the FDT is connected via an E1, an E20 or an E8:
- 32-bit OS
  C:\Program Files\Renesas\FDT4.xx\Drivers\for_32bit\Renesas_E_Series_USB
- 64-bit OS
  C:\Program Files\Renesas\FDT4.xx\Drivers\for_64bit\Renesas_E_Series_USB

(c) Other:
- 32-bit OS
  C:\Program Files\Renesas\FDT4.xx\Drivers\for_32bit\Hmse_USB
- 64-bit OS
  C:\Program Files\Renesas\FDT4.xx\Drivers\for_64bit\Hmse_USB

Note: These are the default installation directories.

(2) The [User Account Control] dialog box saying "An unidentified program wants access to your computer" and "Don't run the program unless you know where it's from or you've used it before." appears. To continue the installation, click on [Allow].
(3) [Device Driver Installation Wizard] appears. Click on the [Next] button.
(4) A dialog box appears asking "Would you like to install this device software?". Click on the [Install] button.
(5) When the driver installation is complete, click on the [Finish] button on the [Device Driver Installation Wizard] screen.

12. Connecting Two or More E1s or E20s

The following restriction applies when two or more E1s or E20s are connected to a single host computer.

If the USB cable is connected to or disconnected from an E1 or E20 or the power for an E20 is turned on or off during communication, the FDT may encounter a communications error or be terminated.

13. 1-Line Connection of M16C Devices

For the devices that support 1-line connection, refer to the technical update given below.

- M16C/63, 6C group: TN-16C-A186A/E
- M16C/65, 64A group: TN-16C-A188A/E

14. 1.8-V Programming of R8C Devices

This application supports 1.8-V programming of some R8C devices via the E8a. If you want the emulator to supply power to the user target board, note the following points.

- When the power voltage level should be 1.8 V or above and below 2.7 V
  (a) GUI operation
  Select "1.8V" for "Information on the user-power supply" in the "Target Power Settings" dialog box.
  (b) Script
  Specify "User1.8" as parameter "CONNECT VOLTAGE" for the "Connect" command.
- When the power voltage level should be 2.7 to 5.5 V
  (a) GUI operation
  Deselect "1.8V" for "Information on the user-power supply" in the "Target Power Settings" dialog box.
  (b) Script
  Do not specify "User1.8" as parameter "CONNECT VOLTAGE" for the "Connect" command.

15. Manipulating the User Boot Area in the RX610-Group Devices

If none of the valid ID codes has been set before a generic boot device is connected (i.e. the device is not protected), manipulation of the User Boot Area gets disabled on completion of the connection. To enable manipulation of the User Boot Area, set a valid ID code before connecting the generic boot device.

16. Erasure of User Boot Area

The default setting for this option is "No". In this case, FDT does not erase the User Boot Area even if the "Device Protection" option is set as "Automatic". When you want to erase the User Boot Area before programming, please set this option as "Yes".

17. Message That Appears after the FDT Has been Installed

Although message "This program might not have installed correctly" may appear after the FDT has been installed, select "This program installed correctly" because there are no problems unless some errors have been reported during the process of installing the FDT.

18. Index for the Unique Code

When all of the following conditions are satisfied in Simple Interface Mode, the index for programming of the unique code is incremented by two after a device has been programmed with a unique code.

(1) Unique code programming is enabled.
(2) The "Download File" radio button is selected.
(3) A file is specified for writing to "User / Data Area".
(4) A file is specified for writing to "User Boot Area".