RENESAS Tool News

Note on Using Integrated Development Environment CubeSuite+

When using CubeSuite+, take note of the following problems:

- With occurrence of error E2000003 in saving files
- With stopping of the high-speed on-chip oscillator during operation of a subsystem clock in the RL78/G14 group of MCUs
- With executing programs in steps when reading out the data from the data flash memory

1. Problem with Occurrence of Error E2000003 in Saving Files

1.1 Products Concerned

The following products whose CubeSuite+ common program groups are V1.01.00 to V2.00.00 are concerned:
- C Compiler and IDE for RL78/78K Family
- C/C++ Compiler and IDE for RX Family
- C Compiler and IDE for V850 Family
- Evaluation edition of CubeSuite+

1.2 Description

If error E2000003 occurs when files that have been opened in the editor are saved, the file size may become 0 and the content of the file may be lost.

1.3 Workaround

1.3.1 How to Save a File
   Be sure to save the content edited by an editor with either of the following functions:
   - Selecting Save *** from the Edit menu (see NOTE)
   - Save button
   - Shortcut key (Ctrl+ S)
   - Selecting Save *** by right-clicking on the *** tab on the editor panel (see NOTE)

NOTE: *** shows a file name.

If you exit CubeSuite+ or close the editor panel without saving the edited content, the confirmation screen for saving the content will be displayed.
If saving is made on this confirmation screen and the error occurs, the content of a file cannot be restored by using the following methods described in Section 1.3.2 because the editor exits when the error dialog box is closed.
Therefore, please save your file with the methods described above when editing the content by an editor.

1.3.2 Workaround for Occurrence of Error E2000003 in Saving Files
If error E2000003 occurs when a file is saved, check the file size by the Explorer. If the file size is 0, save the content with the following method:

CAUTION:
On the editor panel, do not select large amounts of contents by using the shortcut key (Ctrl + A) or a mouse.

(1) Make the following processing to reduce the memory size of the host machine which is used by CubeSuite+:
  - Disable Rapid Build in the Build menu.
  - Disconnect the debugging tool if the debugging tool is connected.
  - Deselect all checkboxes of items in Text Editor of the Option dialog box.
  - Close all panels except for the Editor panel.
  - Among the files opened in the Editor panel, close the erroneous files that are not to be saved.

(2) Change the width or height of the main window of CubeSuite+, which can be scaled to a larger or smaller size.

(3) Save the file again.

(4) If error E2000003 is output in (3) above when the file is saved, confirm the memory size of CubeSuite+ with the following procedure.
Divide and copy the content of the file, and paste it to the external editor for saving the file.

(4.1) Refer to the process information on CubeSuite+ from a task

manager of Windows and confirm that the following memory
value is 500 MB or lower:
- Virtual memory (for Windows XP)
- Commit size
   (for Windows Vista, Windows 7, and Windows 8)

(4.2) Select and copy the content of a file on the Editor panel
of CubeSuite+ within the range of less than 6,400,000
characters. (see NOTE)

NOTE:
 When 100 to 200 characters are included in one line,
 select and copy the content in 32,000 to 64,000 lines.

(4.3) Paste the copied content to the external editor.

(4.4) Repeat copying and pasting the content of a file.
After pasting all contents remained on the Editor panel of
CubeSuite+ to the external editor, save the file on the
external editor.

1.4 Schedule for Fixing the Problem
This problem will be fixed in CubeSuite+ V2.01.00.

2. Problem with Stopping of the High-speed On-chip Oscillator During Operation of a Subsystem Clock in the RL78/G14 Group of MCUs
2.1 Products Concerned
The following products whose CubeSuite+ common program groups are
V1.00.00 to V2.00.00 are concerned:
- C Compiler and IDE for RL78/78K Family
- Evaluation edition of CubeSuite+

2.2 Description
In the RL78/G14 group of MCUs, when all conditions in section 2.3 below
are met, an error message is shown as "Executing program failed".

2.3 Conditions
The error occurs when all the following conditions are met:
(1) On the Property panel of the debugging tool, Monitor clock in the
    Connect Settings tab is set as System.
(2) The high-speed on-chip oscillator is set as 64 MHz or 48 MHz.
    (see NOTE)
(3) The high-speed on-chip oscillator is stopped.
(4) A subsystem clock is set for the system clock.
(5) During execution of the user program, (2) to (4) above are set and

the program is executed again after a break occurs.

NOTE:
The high-speed on chip oscillator frequency is set by
User option byte value in the Link Options tab on the Property panel
of the build tool.

2.4 Workaround
On the Property panel, set Monitor clock in the Connect Settings tab
as User.

NOTE:
Due to modification of the settings, the response for debugging
may be lowered in CubeSuite+.

2.5 Schedule for Fixing the Problem
Fixing this problem is under consideration at a later revision
of the product.

3. Problem with Executing Programs in Steps When Reading Out the Data from the Data Flash Memory

3.1 Products Concerned
The following products whose CubeSuite+ common program groups are
V2.00.00 are concerned:
- C Compiler and IDE for RL78/78K Family
- Evaluation edition of CubeSuite+

3.2 Description
When using E1 emulator for all the MCUs of the RL78 family and executing
programs in steps on the source panel, if instruction 1 and 2 are
included in the 1 line of C language source, instruction 2 may not
be executed.
Instruction 1: Read-out instruction of the data flash memory
Instruction 2: Either of the following branch instructions:
- call return instruction
- unconditional branch instruction
- conditional branch instruction
- conditional skip instruction

However, if the following library or command is used, this problem
doesn't occur:
- Using EEPROM emulation library for data flash memory control
- Using read-out command "PFDL_CMD_READ_BYTES" of flash data library for
  read-out of data flash memory

3.3 Workaround

When doing step execution of the C source line which includes both instruction 1 and instruction 2 in Section 3.2, please do it on the disassemble panel.

3.4 Schedule for Fixing the Problem

This problem will be fixed in CubeSuite+ V2.01.00.