[Note]

CS+, CubeSuite+, and e² studio
Integrated Development Environments

Outline

When using the CS+, CubeSuite+, or e² studio integrated development environment, take note of the problem
described in this note regarding the following point.

1. Using an on-chip debugging emulator while the sub-system clock of certain RL78 family products is operating

1. Using an On-chip Debugging Emulator while the Sub-system Clock of Certain
RL78 Family Products is Operating

1.1 Applicable Software Products

- RL78 Family C Compiler Package (with IDE)
  The version of the CS+ for CC common program is V3.00.00 or later.
- RL78 and 78K Family C Compiler Package (with IDE)
  The version of the CS+ for CA, CX common program is V3.00.00 or later, or the version of the CubeSuite+
  common program is V2.02.00 or later.
- [Evaluation edition] Integrated Development Environment CS+ for CC
  The version of the CS+ for CC common program is V3.00.00 or later.
- [Evaluation edition] Integrated Development Environment CS+ for CA, CX
  The version of the CS+ for CA, CX common program is V3.00.00 or later.
  The version of the CubeSuite+ common program is V2.02.00 or later.
- The version of the e² studio is V1.1.0 or later.

Applicable emulators: E1, E20, and E2 emulator Lite

1.2 Applicable MCUs

RL78/I1D and RL78/G1F groups

1.3 Details

After the setting “System” is made for [Monitor clock] in [Clock] on the [Connect Settings] tab of the property panel of
the debugging tool, a communications error may arise between the emulator and MCU so that the debugging tool does
not operate correctly when a program is stopped while the sub-system clock is operating.
1.4 Conditions

This problem arises if the following conditions are all met:

(1) The setting of bit 6 (CSS) in the system clock control register (CKC) of the MCU is “1” (selecting the sub-system clock).

(2) Either of the following settings (a) or (b) is in place.

   (a) The setting of bit 4 (MCM0) in the system clock control register (CKC) of the MCU is “1” (selecting the high-speed system clock as the main-system clock).

   (b) The setting of bit 0 (MCM1) in the system clock control register (CKC) of the MCU is “1” (selecting the medium speed on-chip oscillator clock as the main on-chip oscillator clock).

Note: The problem does not arise when the setting of bit 4 (MCM0) in the system clock control register (CKC) is “0” (selecting the main on-chip oscillator clock as the main-system clock) and that of bit 0 (MCM1) is “0” (selecting the high-speed on-chip oscillator clock as the main on-chip oscillator clock).

1.5 Workaround

Do not stop a program while the sub-system clock is operating when the setting “System” has been made for [Monitor clock] in [Clock] on the [Connect Settings] tab of the property panel of the debugging tool.

1.6 Schedule for Fixing the Problem

This problem will be fixed in the next version.
## Revision History

<table>
<thead>
<tr>
<th>Rev.</th>
<th>Date</th>
<th>Description</th>
<th>Page</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>