

## CS+ RL78, 78K0R Compiler CA78K0R V1.72

## **Release Note**

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## Chapter 1 Target Devices

The target devices supported by the CA78K0R are listed on the Website.

Please see this URL.

CS+ Product Page:

http://www.renesas.com/cs+



# Chapter 2 User's Manuals

Please read the following user's manuals along with this document.

Manual Name	Document Number
CubeSuite+ V2.01.00 RL78, 78K0R Coding	R20UT2774EJ0100
CubeSuite+ V2.00.00 RL78, 78K0R Build	R20UT2623EJ0100
CubeSuite+ V2.02.00 Message	R20UT2871EJ0100



### Chapter 3 Keywords When Uninstalling the Product

There are two ways to uninstall this product.

- Use the integrated uninstaller from Renesas (uninstalls all CS+ components)
- Use the Windows uninstaller (only uninstalls this product)

To use the Windows uninstaller, select "CS+ CA78K0R V1.72" from "Programs and Features" of the control panel.



## Chapter 4 Changes

This chapter describes changes to the CA78K0R.

There is a possibility that the following changes will affect code.

#### 4.1 Changes to the CA78K0R

This chapter describes the changes to the CA78K0R from V1.71 to V1.72.

#### 4.1.1 Rectified points for caution

Points for caution on the following five items no longer apply.

- (1) Binary Operators and Identifiers which are Qualified as volatile
- (2) Pre-Incrementing, Pre-Decrementing, and Post-Decrementing Array Elements
- (3) Sequential Access when Array Elements and Structure or Union Members are Cast from the near to the far Attribute
- (4) Problem with the strcmp and strncmp Functions Returning Incorrect Values
- (5) Problem with the strtoul Function Returning Incorrect Values



## Chapter 5 Points for Caution

This section describes cautionary notes for using CA78K0R V1.72.

### 5.1 Cautionary notes for CA78K0R

#### 5.1.1 Startup Routine

The startup routine includes a process of initializing the stack area, and this may lead to a reset by the watchdog timer depending on the size of the stack area.

#### [Workaround]

If the watchdog timer is generating a reset, change the startup routine to include processing for the watchdog timer enable register to clear and start counting by the timer counter between all steps of processing for initialization.

#### 5.1.2 Stack usage tracer

The stack usage tracer calculates the size of the stack to be used by the following runtime library on the assumption that the device supports the extended instruction set.

- Isdiv, Iudiv, Isdivr, Iudivr
- Isrem, lurem, Isremr, luremr
- divuw, divuwr

If the device you are using does not support the extended instruction set, adjust the stack size according to "6.14 Library Stack Consumption List" in "RL78, 78K0R Coding".



## Chapter 6 Restrictions

This section describes the restrictions for the CA78K0R.

#### 6.1 Restrictions for the CA78K0R

None.

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