# **Microcontroller Technical Information**

	Document No.	ZMT-	F35-10-0002	1/3
CC78K0	Date issued	Nove	mber 1, 2010	
78K0 C Compiler	Issued by	MCU	Tool Product Marketing Depa	ırtment
(for English/Japanese Version Windows)		MCU Software Division		
Upgrade		MCU	Business Unit	
		Rene	esas Electronics Corporation	
Related documents	Document		Usage restriction	
CC78K0 Ver. 4.10 Operating Precautions:	classification	$\sqrt{}$	Upgrade	
ZUD-CD-10-0202			Document modification	
			Other notification	

### 1. Product types and version

Product	Outline	Old Version	New Version
μSxx17CC78K0	78K0 C compiler package CC78K0	Ver. 4.00	Ver. 4.10

Product	Outline	Target Version
μSxx17SP78K0	78K0 software package SP78K0	Ver. 4.01

Remark xx indicates AB or BB.

#### 2. Upgrade details

The major revisions in CC78K0 Ver. 4.10 are shown below. For details, see *CC78K0 Ver. 4.10 Operating Precautions* (ZUD-CD-10-0202) supplied with the product.

(1) Removal of usage restrictions

15 restrictions have been removed.

For details, see 78K0 C Compiler CC78K0 Usage Restrictions (ZBG-CD-10-0024).

(2) Improvement of optimization

The bit field code has been improved.

(3) Addition of optimization option

The -qg option, which is used to prioritize debugging, has been added.

(4) Addition of an option used to specify 78K0 common objects

The -common option, which is used to specify 78K0 common objects, has been added.

- (5) Addition of Assign tab to the PM+ Compiler Options dialog box
- (6) Support of extended function registers (EFRs)

#### 3. How to upgrade

#### (1) $\mu$ SAB17CC78K0 and $\mu$ SBB17CC78K0

• If the CD is not required: Free upgrade

Download the software from the **Development Tools Download** page. When using this method, the CD will not be delivered but the upgrade is free of charge.

English version: <a href="http://www2.renesas.com/micro/en/ods/">http://www2.renesas.com/micro/en/ods/</a> → Click Version-up Service.

Japanese version: http://www2.renesas.com/micro/ja/ods/

#### • If the CD is required: Charged upgrade

Fill in the essential items in the attachment *Application for Software Product Charged Upgrade* and send it to a Renesas Electronics distributor or sales representative. When using this method, a fee will be charged for the upgrade and the CD will be delivered.

The part number to be entered in the form depends on the purchased product. The correspondence between the purchased product and the part number after upgrade is as follows:

Purchased Product	Part Number for Charged Upgrade
μSAB17CC78K0	μSAB17CC78K0-S
μSAB17CC78K0-5	μSAB17CC78K0-5-S
μSAB17CC78K0-10	μSAB17CC78K0-10-S
μSAB17CC78K0-20	μSAB17CC78K0-20-S
μSAB17CC78K0-50	μSAB17CC78K0-50-S
μSBB17CC78K0	μSBB17CC78K0-S
μSBB17CC78K0-5	μSBB17CC78K0-5-S
μSBB17CC78K0-10	μSBB17CC78K0-10-S
μSBB17CC78K0-20	μSBB17CC78K0-20-S
μSBB17CC78K0-50	μSBB17CC78K0-50-S

#### (2) $\mu$ SAB17SP78K0 and $\mu$ SBB17SP78K0

• Free upgrade (without the CD)

Download the upgraded software (CC78K0) from the **Development Tools Download** webpage. When using this method, the CD will not be delivered but the upgrade is free of charge. Because this is an upgrade of only one of the SP78K0 components, only the relevant tool is downloaded.

English version:  $\underline{\text{http://www2.renesas.com/micro/en/ods/}} \rightarrow \text{Click Version-up Service}.$ 

Japanese version: <a href="http://www2.renesas.com/micro/ja/ods/">http://www2.renesas.com/micro/ja/ods/</a>

## 4. Upgrade start date

- (1) Free upgrade (without the CD)

  The upgraded product has been downloadable from the website since October 21, 2010.
- (2) Charged upgrade (with the CD) From November 1, 2010

# **Application for Software Product Charged Upgrade**

Customers wishing to upgrade the product by using the charged upgrade (with the CD) are requested to fill out the following form and send it to a Renesas Electronics distributor or sales representative.

Upgrade Product	Version
CC78K0 (for Windows)	Ver. 4.10

Application cut-off date: January 31, 2011

Part number	μS17CC78K0-	
•	charged upgrade product corresponding to the part number of the product enses have been purchased, be sure to write S and numbers after the hypher	
Serial number (10 digits)		
product. If you already up	number indicated on the program product license or the CD case of the ograded your product, you received a new serial number. However, write the then the product was first purchased in the above column.	
Company name		
Department name		
Name of applicant		
E-mail address		
Date of application		
o be filled in by the distribute	or or Renesas Electronics sales representative	
Name of distributor		
Person in charge		
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Date of application		