Microcomputer Technical Information

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CC78K4 78K4 Series C Compiler Document Modifications	Document No.	SBG-DT-04-0019		1/1
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Related documents CC78K4 C Compiler V2.30 or Later Language User's Manual: U15556EJ1 CC78K4 C Compiler V2.30 or Later Operation User's Manual: U15557EJ1	Notification classification		Usage restriction	
			Upgrade	
		√	Document modification	
			Other notification	

1. Target product

   CC78K4 V2.30

2. Target documents

   CC78K4 C Compiler Ver.2.30 or Later Language User's Manual (Document Number: U15556EJ1V0UM00)

3. Modified items

   See the attachment.

Modifications in CC78K4 User's Manual

1. List of Modifications

No.	Item	Document Number	Page
1	Addition of description to CPU control instruction (function)	U15556EJ1V0UM00	352
2	Addition of description to CPU control instruction (restriction)	U15556EJ1V0UM00	353

2. Details of Modifications

No.1 Addition of description to CPU control instruction (function)

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CC78K4 C Compiler Ver.2.30 or Later Language User's Manual	U15556EJ1V0UM00	352

[Description]

Descriptions have been added to **FUNCTION**.

Before change:

FUNCTION

- The following codes are output to an object to create an object file.

(1) Instruction for HALT operation[Note 1]
(2) Instruction for STOP operation[Note 2]
(3) BRK instruction
(4) NOP instruction

Notes 1. The setting of STOP mode and selection of the internal system clock is possible using the STBC register. The C compiler reads STBC, checks the CK1/CK0 value of the internal system clock selection, and accordingly outputs the instruction to set the value for HALT to STBC.

2. The C compiler reads STBC, checks the CK1/CK0 value of the internal system clock selection, and accordingly outputs the instruction to set the value for STOP to STBC.

After change:

FUNCTION

- The following codes are output to an object to create an object file.

(1) Instruction for HALT operation[Notes 1, 2]
(2) Instruction for STOP operation[Notes 1, 3]
(3) BRK instruction
(4) NOP instruction

Notes 1. The setting of STOP mode and selection of the internal system clock is possible using the STBC register. The codes for the STBC register are output (codes to clear bits 2, 3, 6, and 7 to 0 are output).

	7	6	5	4	3	2	1	0
STBC	0	0	CK1	CK0	0	0	STP	HLT

2. The C compiler reads STBC, checks the CK1/CK0 value of the internal system clock selection, and accordingly outputs the instruction to set the value of CK1/CK2/STP/HLT for HALT to STBC.

3. The C compiler reads STBC, checks the CK1/CK0 value of the internal system clock selection, and accordingly outputs the instruction to set the value of CK1/CK2/STP/HLT for STOP to STBC.

No.2 Addition of description to CPU control instruction (restriction)

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CC78K4 C Compiler Ver.2.30 or Later Language User's Manual	U15556EJ1V0UM00	353

[Description]

Descriptions have been added to **RESTRICTIONS**.

Before change:

RESTRICTIONS

- When this feature is used, HALT( ), STOP( ), BRK( ), and NOP( ) cannot be used as function names.
- Describe HALT, STOP, BRK, and NOP in uppercase letters. If they are described in lowercase letters, they are handled as ordinary functions.

After change:

RESTRICTIONS

- When this feature is used, HALT( ), STOP( ), BRK( ), and NOP( ) cannot be used as function names.
- Describe HALT, STOP, BRK, and NOP in uppercase letters. If they are described in lowercase letters, they are handled as ordinary functions.
- 0 is written to bits 2, 3, 6, and 7 of the STBC register when HALT( ) or STOP( ) is used. Therefore, do not use these functions where 0 should not be written, such as in a device with a subclock.