[Notes]
C Compiler Package for RL78 Family (CCRL#028)

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Rev.1.00
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Overview

When using the CC-RL C compiler package for the RL78 family, note the following point:

1. When an invalid bit position is specified for a bit-manipulation instruction (CCRL#028)
   Note: The number following the note is an identification number for the precaution.

1. When an invalid bit position is specified for a bit-manipulation instruction (CCRL#028)

1.1 Applicable Products

CC-RL V1.01.00~V1.10.00

1.2 Details

Specifying an invalid value (a value other than 0 to 7) to a bit position for a bit-manipulation instruction on an assembly source program is supposed to cause an error in assembly, but an object might be created without causing an error. Note that this does not apply to assembly instructions generated by the compiler. However, this applies to assembly instructions (that meet the conditions) described in the #pragma inline_asm function.

1.3 Conditions

This note applies to assembly statements that meet all the conditions from (1) to (3):

(1) One of the following bit-manipulation instructions is described:
mov1, and1, or1, xor1, set1, clr1, bt, bf, btclr, .bt, and .bf

(2) An operand is specified in either of the following formats:
[HL].bit
ES:[HL].bit

(3) A value other than 0 to 7 is specified for a bit position in (2).

1.4 Examples

Examples of the problem are shown below. The parts corresponding to the conditions are shown in red.

[Example 1]
asrl -cpu=S3 tp1.asm

```
# tp1.asm
bt [hl].-1,$L1     ;(1)(2)(3)
```

In this example, an object is created as the following instruction.

```
bt a.7,$L1
```

[Example 2]
asrl -cpu=S3 tp2.asm

```
# tp2.asm
set1 [hl].-1     ;(1)(2)(3)
sub x,a
```

In this example, the following instruction sequences are created. As shown in this example, an object different from the original source program might also be generated in subsequent instructions.

```
set1 0xffe71.7
subw sp,#0
```

1.5 Workaround

Use an integer from 0 to 7 when specifying a bit position for a bit-manipulation instruction.

1.6 Schedule for fixing the problem

The problem will be fixed in CC-RL V1.11.00. The release date has not yet been decided.

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jul.01.21	-	First edition issued

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