RENESAS Tool News

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A Note on Using C-Compiler Packages M3T-NC308WA and M3T-NC30WA

Please take tone of the following problem in using the M3T-NC308WA and M3T-NC30WA C-compiler packages:

- On an inline function that returns a value of type _Bool

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1. **Products and Versions Concerned**

   (1) C Compiler packages for the M16C/60, M16C/30, M16C/Tiny, M16C/20, M16C/10, and R8C/Tiny series of MCUs
   M3T-NC30WA V.5.10 Release 1 through V.5.30 Release 1

   (2) C Compiler packages for the M32C/80, and M16C/80 series of MCUs
   M3T-NC308WA V.5.00 Release 1 through V.5.20 Release 1

2. **Description**

   If a source file is compiled in which an inline function that returns a value of type _Bool is called, a system error will arise.

   2.1 Conditions

   This problem occurs if the following conditions are all satisfied:

   (1) An inline function that returns a value of type _Bool is declared.

   (2) After this definition, the above inline function is called.

   (3) Option -Oforward_function_to_inline(-OFFTI) is not used at compilation.

   2.2 Example

```
-----------------------------------------------------------------
inline _Bool sub(void)      // Condition (1)
{
```

```
  return 1;
}

void func(void)
{
  _Bool ret;
  ret=sub();            // Condition (2)
}
```
---

3. **Workaround**

   This problem can be circumvented in any of the following ways:

   (1) Use the -OFFTI option at compilation.

   (2) Declare no inline function having a return value of type _Bool.

   (3) Define the return value of the inline function as of type other than _Bool.

4. **Schedule of Fixing the Problem**

   We plan to fix this problem in our next release of the products.
