RENESAS Tool News

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

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

- On nesting inline functions

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1. **Products and Versions Concerned**
   The C-compiler package for the M32C/80 and M16C/80 series:
   M3T-NC308WA V.5.00 Release 1 through V.5.20 Release 1

   The C-compiler package for the M16C/60, M16C/30, M16C/Tiny, M16C/20, M16C/10, and R8C/Tiny series:
   M3T-NC30WA V.5.10 Release 1 through V.5.30 Release 1

2. **Description**
   When an inline function that takes a parameter is nested, it may refer to an incorrect argument (a variable, not an argument).

3. **Conditions**
   This problem occurs if the following conditions are both satisfied:
   (1) An inline function is nested in another.
   (2) Inline function A as a calling source and inline function B as the destination take the same parameter.

   Example

   ```
   inline B(int aaa, char ccc)        /* Condition (2) */
   {
         .....
   ```

```
}
inline A(int c, int aaa, char *ccc)   /* Condition (2) */
{
int  i;
char c;
    B(i,c);                /* Condition (1) */
}
```

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4. Workaround

This problem can be circumvented any of the following ways:

(1) Change the name of the parameter taken by the destination function (inline function B in the above example).

(2) Don't nest any inline function.

(3) Compile the program using the -Oforward_function_to_inline(-OFFTI) option. (This option can be used on M3T-NC308WA V.5.20 Release 1 and M3T-NC30WA V.5.30 Release 1 only.)

5. Schedule of Fixing the Problem

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