RENESAS Tool News

A Note on Using C Compilers M3T-NC308WA, M3T-NC30WA, M3T-NC79WA and M3T-NC77WA

Please take note of the following problem in using the M3T-NC308WA, M3T-NC30WA, M3T-NC79WA, and M3T-NC77WA C compilers with an assembler and integrated development environment:

- On standard library functions atof and strtod

1. **Products and Versions Concerned**

   M3T-NC308WA V.1.00 Release 1 -- V.5.10 Release 1
       for the M32C/80 and M16C/80 series MCUs
   M3T-NC30WA V.1.00 Release 1 -- V.5.10 Release 1
       for the M16C/60, M16C/30, M16C/20, and M16C/10 series MCUs
   M3T-NC79WA V.2.00 Release 1 -- V.4.10 Release 1A
       for the 79xx series MCUs
   M3T-NC77WA V.3.00 Release 1 -- V.5.20 Release 4
       for the 77xx series MCUs

2. **Description**
   If the argument of a standard library function atof or strtod is a character string beginning with a period (for example, ".12345"), the result of the conversion of the function becomes zero.

3. **Condition**
   This problem occurs under the condition that if all the spaces contained in the argument are omitted, its character string begins with a period.

4. **Example**

```
#include <stdlib.h>

double   d;

int    main( void )
{
     d = atof( ".12345" ); /* The character string of
                  the argument begins with a period */
}
```
----

5. **Workaround**

Place a "0" in front of the period.

```
#include <stdlib.h>

double   d;

int    main( void )
{
     d = atof( "0.12345" );
}
```
----

6. **Schedule of Fixing the Problem**

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