RENESAS Tool News

The C Compiler Package for the M16C Series, R8C Family of MCUs Revised to V.5.45 Release 01

We have revised the C compiler package for the M16C series, R8C family of MCUs (M3T-NC30WA) from V.5.45 Release 00 to V.5.45 Release 01.

1. Descriptions of Revision

In this section, main items of the revision are described. For further information about the revision, see the release note of the revised product.

1.1 Functions Improved

(1) The MCUs of the following groups have been added to the support line:

- M16C/63, M16C/5LD, M16C/56D, M16C/6C, and M16C/6B

For the MCUs of these groups, their SFR definition files can be generated when new workspaces are created in High-performance Embedded Workshop.

(2) In Call Walker (a stack size calculation utility tool), the methods of presenting values of stack usage have been improved as follows:

If the Show Used Stack command and the Show Simple Symbols command are selected, the value of stack usage presented at the next to a function (parent) includes those of the functions (children, not displayed) that are called from the parent function.

The maximum value of the stack usage includes also the values of stack usage of the functions (children) that have been not displayed.

1.2 Problems Fixed

The following five problems have been fixed:

(1) With using SQMlint (the MISRA C rule checker) with High-performance Embedded Workshop

For details, see RENESAS TOOL NEWS Document No. 090801/tn1 at:

https://www.renesas.com/search/keyword-search.html#genre=document&q=090801tn1

    (2) With the automatic generation function of variable vector tables
       For details, see RENESAS TOOL NEWS Document No. 091001/tn4 at:
      https://www.renesas.com/search/keyword-search.html#genre=document&q=091001tn4
    (3) With calculating stack usage
       For details, see RENESAS TOOL NEWS Document No. 091116/tn2 at:
      https://www.renesas.com/search/keyword-search.html#genre=document&q=091116tn2
    (4) With errors arising after linking is performed
       For details, see RENESAS TOOL NEWS Document No. 091116/tn3 at:
      https://www.renesas.com/search/keyword-search.html#genre=document&q=091116tn3
    (5) With Windows being abnormally terminated when optimization of replacing
external variables with constants applied

1.3 High-performance Embedded Workshop Updated

   The High-performance Embedded Workshop included in the package have been
updated from V.4.05.01 to V.4.07.01.

   For details of the revision, which was made in two steps, see the following
RENESAS TOOL NEWS items:
    - Document No. 090701/tn1 (to V.4.06.00) at:
     https://www.renesas.com/search/keyword-search.html#genre=document&q=090701tn1
    - Document No. 091001/tn1 (to V.4.07.00) at:
     https://www.renesas.com/search/keyword-search.html#genre=document&q=091001tn1_e
   In the revision from V.4.07.00 to V.4.07.01, modification is made only to the
Renesas logo that appears after the IDE is started.

1.4 Remaining Problems

   The following five problems still remain unfixed in M3T-NC30WA V.5.45 Release
01:
    (1) With Performing Right-Shift Operations
       For details, see RENESAS TOOL NEWS Document No. 070716/tn4 at:
      https://www.renesas.com/search/keyword-search.html#genre=document&q=070716tn4
    (2) With Using Compile Option -OSFA (-Ostack_frame_align)
       For details, see RENESAS TOOL NEWS Document No. 070701/tn5 at:
      https://www.renesas.com/search/keyword-search.html#genre=document&q=070701tn5
    (3) With Building a Static Function Having a Static Variable within It
       For details, see RENESAS TOOL NEWS Document No. 080716/tn1 at:
      https://www.renesas.com/search/keyword-search.html#genre=document&q=080716tn1
    (4) With initializing a member of a structure using an expression
      containing the sizeof operator
       For details, see RENESAS TOOL NEWS Document No. 080716/tn2 at:
      https://www.renesas.com/search/keyword-search.html#genre=document&q=080716tn2
    (5) With referencing the Map Symbol Information window
       For details, see RENESAS TOOL NEWS Document No. 080916/tn2 at:
      https://www.renesas.com/search/keyword-search.html#genre=document&q=080916tn2

   In addition, a problem remains when the V.5.45 Release 01 product is used along

with the MISRA C rule checker (SQMlint).

For details of the problem, see RENESAS TOOL NEWS Document No. 070901/tn2 at:

https://www.renesas.com/search/keyword-search.html#genre=document&q=070901tn2

2. How to Update Yours and Purchase the Revised Product

2.1 Updating

Online update is available free of charge. Update yours in either of the following ways:

(1) Use AutoUpdate Utility. This service is available on and after April 5.

(2) Download the update program of the product from:

https://www.renesas.com/nc30wa_download

Then execute it. This site will be opened from April 5.

2.2 First Ordering

When you place an order for the product, do for the C compiler package for the R8C and M16C families.

This compiler package contains the following three compiler packages:

- the C compiler package for the M16C series, R8C family (M3T-NC30WA)
- the C compiler package for the M326C series (M3T-NC308WA)
- the C compiler package for the R32C series

In addition, supply the following items of information to your local Renesas Electronics sales office or distributor:

Product type: C compiler package for the R8C and M16C families 2010.04

Host OS: Windows Vista(R), Windows(R) XP, or Windows(R) 2000

Notice: The 64-bit editions of Windows Vista(R) and Windows(R) XP excluded.

For the price of the product, also contact the above sales office or distributor.