RENESAS Tool News

RENESAS TOOL NEWS on July 16, 2009: 090716/tn2

The C Compiler Package for the R32C MCU Series Revised to V.1.02 Release 00

We have revised the C compiler package for the R32C MCU series from V.1.01 Release 00 to V.1.02 Release 00. For details of the product, go to:

http://www.renesas.com/r32c_c

The above URL is one of our global site (in English).

1. Descriptions of Revision

For details, please see the release note included with this product.

1.1 Functions Introduced and Improved

(1) Addition of generated SFR files

The following MCU groups have been added to the groups selectable when new workspaces are created:

- R32C/111 group
- R32C/161 group

So, the SFR files for these MCU groups can be generated.

(2) Improvement to compile option "-I"

The number of directories for searching header files by using option "-I" has been increased from 50 to 256.

(3) Improvement to generated codes

Improvement has been made to the generated codes for executing the shift operations of 64-bit integer types (singed long long and unsigned long long) fast.

(4) Addition of an assembler directive command Assembler directive command ".OFSA" has been introduced for Setting "Option Function Select Area."

1.2 Compatibility with Windows Vista(R)

The compiler package has been made compatible with the 32-bit edition of Windows Vista(R). On this OS, you can run the compiler package

with your user rights.

Note that the compiler package still remains incompatible with the 64-bit edition of Windows Vista(R).

1.3 High-performance Embedded Workshop Updated

The High-performance Embedded Workshop included in the compiler package has been updated to V.4.05.01. For details of the revision to V.4.05.01, see RENESAS TOOL NEWS Document No. 090201/tn3 at: http://tool-support.renesas.com/eng/toolnews/090201/tn3.htm

1.4 AutoUpdate Utility Updated

The AutoUpdate Utility included in the compiler package has been updated to V.1.05.00. For details of the revision to V.1.05.00, see RENESAS TOOL NEWS Document No. 090216/tn1 at: http://tool-support.renesas.com/eng/toolnews/090216/tn1.htm

1.5 The Simulator Debugger for the R32C Series Updated

The simulator debugger for the R32C series included in the compiler package has been updated to V.1.01.00. For details of the revision to V.1.01.00, see RENESAS TOOL NEWS Document No. 090716/tn3. This item of news is also accessible on and after July 21 at: http://tool-support.renesas.com/eng/toolnews/090716/tn3.htm

1.6 Problems Fixed

The following known problems have been fixed:

- (1) With creating projects for the R32C/100 series' MCUs other than those of the R32C/118 and /121 MCU groups
 For details see RENESAS TOOL NEWS Document No. 071216/tn6 at: http://tool-support.renesas.com/eng/toolnews/071216/tn6.htm
- (2) With using preprocessing command #error
 For details see RENESAS TOOL NEWS Document No. 080301/tn2 at: http://tool-support.renesas.com/eng/toolnews/080301/tn2.htm
- (3) With issuing preprocessing directive #pragma DMAC to extend the C compiler's functionality

For details see RENESAS TOOL NEWS Document No. 080416/tn1 at: http://tool-support.renesas.com/eng/toolnews/080416/tn1.htm

- (4) With using the volatile-qualified controlled variable in a for or while statement
 - For details see RENESAS TOOL NEWS Document No. 080616/tn1 at: http://tool-support.renesas.com/eng/toolnews/080616/tn1.htm
- (5) With comparing a bit field variable with 1 or 0For details see RENESAS TOOL NEWS Document No. 080616/tn2 at: http://tool-support.renesas.com/eng/toolnews/080616/tn2.htm

- (6) With using a variable volatile-qualified with the indirect member operator
 - For details see RENESAS TOOL NEWS Document No. 080616/tn3 at: http://tool-support.renesas.com/eng/toolnews/080616/tn3.htm
- (7) With using a volatile-qualified variable in the bit-wise and operation

For details see RENESAS TOOL NEWS Document No. 080616/tn4 at: http://tool-support.renesas.com/eng/toolnews/080616/tn4.htm

- (8) With setting options in the load module converter For details see RENESAS TOOL NEWS Document No. 080701/tn2 at: http://tool-support.renesas.com/eng/toolnews/080701/tn2.htm
- (9) 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: http://tool-support.renesas.com/eng/toolnews/080716/tn2.htm

(10) With compile option -Wno_used_static_function (-WNUSF)For details see RENESAS TOOL NEWS Document No. 081101/tn1 at: http://tool-support.renesas.com/eng/toolnews/081101/tn1.htm

2. Problems Remaining Unfixed

The following problems still remain unfixed in the revised product:

- With building a static function having a static variable within it For details see RENESAS TOOL NEWS Document No. 080716/tn1 at: http://tool-support.renesas.com/eng/toolnews/080716/tn1.htm
- (2) With referencing the Map Symbol Information window For details see RENESAS TOOL NEWS Document No. 080916/tn2 at: http://tool-support.renesas.com/eng/toolnews/080916/tn2.htm

3. Problem with Using MISRA C Rule Checker (SQMlint)

When SQMIint is used in combination with the compiler package, the problem with using options "MISRA2004" and "Group definition file" arises. For details see RENESAS TOOL NEWS Document No. 070901/tn2 at: http://tool-support.renesas.com/eng/toolnews/070901/tn2.htm

4. How to Update Your Product and Purchase the Revised One

4.1 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 July 22.
- (2) Download the update program of the product from: http://www.renesas.com/r32c_c_download

Then execute it. This site will be opened from July 21 on. The above URL is one of our global site (in English).

4.2 First Ordering

When you place an order for the product, supply the following items of information to your local Renesas Technology sales office or distributor:

Product type: C compiler package for R8C family and M16C family (See NOTE)

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

NOTE :

This is the software package into which the following three compiler packages have been integrated:

- C compiler package for the R32C series
- C compiler package for the M32C series (M3T-NC308WA)
- C compiler package for the M16C series, R8C family (M3T-NC30WA)

For details of the C compiler package for R8C family and M16C family, see RENESAS TOOL NEWS Document No. 090716/tn1.

This item of news is also accessible on and after July 21 at:

http://tool-support.renesas.com/eng/toolnews/090716/tn1.htm

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