RENESAS Tool News

C Compiler M3T-NC30WA
V.5.10 Release 1 Upgraded

We have upgraded the M3T-NC30WA C compiler (with an assembler and integrated development environment) for the M16C/60, M16C/30, M16C/20, and M16C/10 series MCUs from V.5.00 Release 2 to V.5.10 Release 1.

1. Descriptions of Upgrade

1.1 Improvements Introduced

(1) Providing the following three compile options:
* The "-fdouble_32(-fD32)" option for treating data of type double as of 32 bits in length
* The "-Wno_used_static_function(-WNUSF)" option for detecting unused static functions
* The "-ferase_static_function=(-fESF=)" option for preventing codes being generated for static functions

(2) Generating a product-sum operation instruction "rmpa" from a sum of products operation written in C language.

(3) Processing switch-case statements much faster.

(4) Providing the #pragma BITADDRESS directive for assigning an external variable of type _Bool to a bit of the specified absolute address.

(5) Representing integer constants in binary notation.

(6) Giving a warning at linking if unused global functions exist.

1.2 Problems Fixed

(1) The following known problems have been fixed:

(2) On an "IF-ELIF-ENDIF" construct in structured description
For details of (1) and (2), see MAEC TOOL NEWS "Notes on C Compilers M3T-NC308WA, M3T-NC30WA, and M3T-NC79WA; and Assemblers AS308, AS30, and AS79 " issued on September 16, 2002.

(3)   On describing an if or switch statement
For details, see MAEC TOOL NEWS "A Note on C Compilers M3T-NC308WA
V.5.00 Release 1 and M3T-NC30WA V.5.00 Release 1" issued on September 16,
2002.

(4)   On successively referencing the same variable in more than one if statement

(5)   On warning option -Wno_used_argument
For details of (4) and (5), see MAEC TOOL NEWS "Notes on C Compilers M3T-
NC308WA, M3T-NC30WA, M3T-NC79WA, and M3T-NC77WA" issued on
October 1, 2002.

(6)   On defining the data type of an array within a structure or union using a
typedef statement
For details, see MAEC TOOL NEWS "Note on C Compilers M3T-NC30WA, M3T-
NC79WA, and M3T-NC77WA" issued on October 1, 2002.

(7)   On placing a #pragma ASM--ENDASM block immediately after the definition of
an inline function

(8)   On defining inline functions
For details of (7) and (8), see MAEC TOOL NEWS "Notes on C compilers M3T-
NC308WA and M3T-NC30WA" issued on December 1, 2002.

(9)   On calling assembler macro functions
For details, see MAEC TOOL NEWS "A Note on C Compiler M3T-NC30WA "
issued on December 16, 2002.

(10)   On referencing return values that use register variables after calling inline
functions
For details, see MAEC TOOL NEWS "A Note on Using C Compiler M3T-NC30WA"
issued on January 16, 2003.

(11)   On hexadecimal escape sequences of string literals

(12)   On conditional jumps in iteration control structures
For details of (11) and (12), see MAEC TOOL NEWS "Notes on Using C
Compilers M3T-NC308WA and M3T-NC30WA" issued on February 1, 2003.

(13)   On describing an AND operation of a variable and an immediate value in the
conditional expression of the if statement
For details, see MAEC TOOL NEWS "A Note on Using C Compiler M3T-NC30WA "
issued on February 16, 2003.

(14)   On placing auto variables
For details, see MAEC TOOL NEWS "A Note on Using C Compilers M3T-
NC308WA and M3T-NC30WA" issued on March 1, 2003.

(15)   On using the #pragma ADDRESS declaration
For details, see MAEC TOOL NEWS "Notes on Using C Compilers M3T-NC308WA

and M3T-NC30WA" issued on March 16, 2003.

(16) On the standard library function "sprintf"
For details, see MAEC TOOL NEWS "A Note on Using C Compilers M3T-NC308WA, M3T-NC30WA, M3T-NC79WA and M3T-NC77WA" issued on March 16, 2003.

2. How to Upgrade the Current Product and Order the Upgraded One

2.1 Online Upgrade (without Charge)
Please download the upgraded product from HERE.

2.2 First Ordering or Upgrading by CD-ROM (with Additional Charge)
Upgrade service in CD-ROM is also available.
When you place an order please furnish the following information to your local Renesas Technology sales office or distributor:

[First Ordering]

Product Type : M3T-NC30WA

Version No. : V.5.10

Release No. : Release 1

Host OS : Windows XP, Windows Me, Windows 98, Windows 95, Windows 2000, or Windows NT 4.0

[Upgrading by CD-ROM]
Please let us know your product's license ID or Serial No. besides the above information.