

[Released on the Web]

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CcnvNC30 C Source Code Converter:

Tool for Assistance in Porting from the NC30 Compiler for the M16C Series and R8C Family to the CC-RL Compiler for the RL78 Family

Outline

The CcnvNC30 C source code converter will be released on the Web. This program converts files of C source code created in a development environment with the NC30 compiler for M16C series and R8C family microcontrollers into files of C source code for the CC-RL compiler for the RL78 family. We supply the product free of charge.

1. Outline of the Product

The CcnvNC30 is a C source code converter that converts the following types of files into C source code for the CC-RL compiler for the RL78 family.

- Applicable C source programs

CcnvNC30 accepts C source programs created in development environments with the following C compiler as inputs.

- NC30 compiler for M16C series and R8C family

The CcnvNC30 converter converts extended specifications in C source programs for the NC30 compiler into extended specifications for CC-RL. The CcnvNC30 converter then generates files of C source code for CC-RL.

This product supports the porting of C source files from the NC30 compiler to CC-RL. Since we do not guarantee the correct operation of programs converted by CcnvNC30, be sure to check the operation of the C source files after conversion.

Device-dependent statements such as assembler instructions and those related to the memory map or SFRs cannot be converted. For such statements, check the operation after manually changing them to suit the RL78 family product you intend to use.

Refer to the User's Manual for details of CcnvNC30. This information will be available from July 5.

<https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ut3685>

CcnvNC30 C Source Converter User's Manual

2. Features

CcnvNC30 is easy to run from the command line of Windows®.

Example of execution:

```
> CcnvNC30 input.c -o=output.c
```

Remarks:

CcnvNC30: Command to run CcnvNC30

input.c: Name of input file

output.c: Name of generated file

Example of input file: input.c

```
#pragma ADDRESS p0 00E0H /* Port P0 register */
char c;
void main(void)
{
```

Example of generated file: output.c

```
/* CcnvNC30 C Source Converter V1.00.00.01 [07 Mar 2016] */
/*****
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*****/
//[CcnvNC30] #pragma ADDRESS p0 00E0H /* Port P0 register */
#pragma address p0=0x00E0
char c;
void main(void)
{
    c = p0;
}
```

#pragma address for NC30 is commented out of the generated file (C source program for CC-RL) and #pragma address for CC-RL is added.

Addresses are not converted. Change them by hand after seeing messages that the given language specifications are dependent on the M16C series and R8C family.

3. Operating Environment

Windows® 10 (32-bit edition, 64-bit edition)

Windows® 8.1 (32-bit edition, 64-bit edition)

Windows® 7 (32-bit edition, 64-bit edition)

4. Obtaining the Product

Obtain the converter from the URL below. This product will be available from July 5.

<https://www.renesas.com/convert-cc-compiler>

Downloadable executable file for CcnvNC30: CcnvNC30.exe

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jul. 01, 2016	-	First edition issued

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