

[Featured Tool]

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Renesas C Compiler Package CC-RL that Maximizes the Performance of the RL78 Family MCUs

Overview

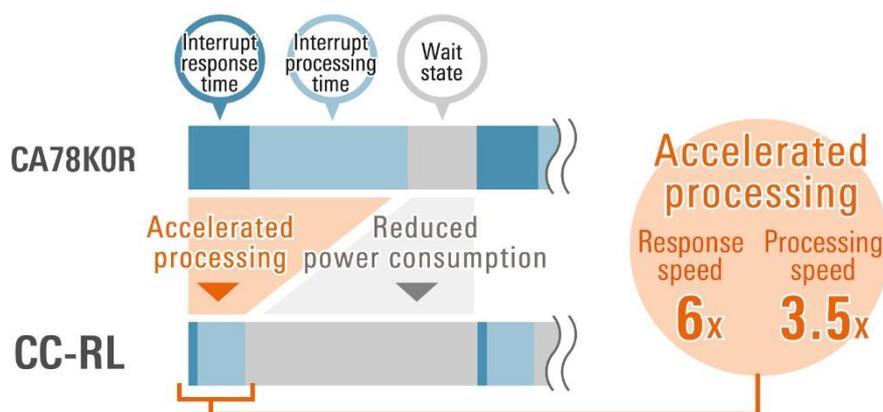
This document gives an overview of CC-RL C Compiler Package for RL78 Family.

Greatly enhanced over the C Compiler Package for RL78 and 78K Families (CA78K0R), CC-RL is a high-performance compiler that maximizes the performance of the RL78 family, incorporating optimization technology to improve code efficiency and program execution speed. It also significantly contributes to decreased power consumption of systems incorporating the RL78 family.

1. Key Features

CC-RL is a high-performance compiler that incorporates optimization technology based on our experience in developing the compiler for RX and RH850 families.

Many systems cycle between the normal state, during which applications run, and the wait state, in which power consumption is minimal. CC-RL allows you to accelerate the program execution speed to reduce the period of the normal state, extending the wait state period and thereby reducing the power consumption of your system. In addition, RL78 has achieved the highest score in the world in EEMBC ULPMark™-PP by using CC-RL, and has been certified as the world’s smallest power consuming MCUs (as of April, 2021).



In the latest version V1.10.00 of CC-RL, processing is **about 3.5 times**^{*} faster and the interrupt response time is **about 6 times**^{*} shorter compared to the previous compiler, CA78K0R.

The code size of programs is also reduced by **about 20%**^{*}. This allows you to include more functionality in the memory storing the programs, further adding value to the system.

^{*} Values measured with a program owned by Renesas.

2. Purchasing the Product

To order the product, contact your local Renesas Electronics sales office or distributor.

For product pricing, make inquiries in the same manner.

For details about purchasing the latest CC-RL, refer to the product page at the following URL:

https://www.renesas.com/rl78_c

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Apr.16.21	-	First edition issued

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