Application Leading Tool for RX V1.01.00 Release Note

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Contents

Chapter 1. Introduction

Application Leading Tool(Applilet) for RX is a software tool to generate device driver code for on-chip peripherals. It generates device driver codes using user settings through GUI. Initialize code and API functions are provided.

Chapter 2. Target Devices

Below is a list of devices supported by the Applilet for RX V1.01.00

RX111 group	
PIN	Device name
36pin	R5F5111JAxLM, R5F51111AxLM, R5F51113AxLM
40pin	R5F5111JAxNF, R5F51111AxNF, R5F51113AxNF
48pin	R5F5111JAxFL, R5F5111JAxNE, R5F51111AxFL, R5F51111AxNE R5F51113AxFL, R5F51113AxNE, R5F51114AxFL ,R5F51114AxNE R5F51115AxFL ,R5F511145xNE
64pin	R5F5111JAxFK, R5F5111JAxFM, R5F5111JAxLF R5F51111AxFK, R5F51111AxFM, R5F51111AxLF R5F51113AxFK, R5F51113AxFM, R5F51113AxLF R5F51114AxFK, R5F51114AxFM, R5F51114AxLF R5F51115AxFK, R5F51115AxFM, R5F51115AxLF
Following documents.	

Manual Name	Document Number
RX111 Group User's Manual: Hardware	R01UH0365JJ0110
	R01UH0365EJ0110

RX110 group	
PIN	Device name
36pin	R5F5110HAxLM, R5F5110JAxLM, R5F51101AxLM, R5F51103AxLM
40pin	R5F5110HAxNF, R5F5110JAxNF, R5F51101AxNF, R5F51103AxNF
48pin	R5F5110JAxFL, R5F5110JAxNE, R5F51101AxFL, R5F51101AxNE R5F51103AxFL, R5F51103AxNE, R5F51104AxFL ,R5F51104AxNE R5F51105AxFL ,R5F51105AxNE
64pin	R5F5110JAxFK, R5F5110JAxFM, R5F5110JAxLF R5F51101AxFK, R5F51101AxFM, R5F51101AxLF R5F51103AxFK, R5F51103AxFM, R5F51103AxLF R5F51104AxFK, R5F51104AxFM, R5F51104AxLF R5F51105AxFK, R5F51105AxFM, R5F51105AxLF
Following documents.	

Manual Name	Document Number
RX110 Group User's Manual: Hardware	R01UH0421JJ0100
	R01UH0421EJ0100

Chapter 3. Operating Environment

- Host machine
  - IBM PC/AT compatibles (Windows® 8, Windows® 7, Windows Vista®)
  - Processor: 1 GHz or higher (must support hyper-threading, multi-core CPUs)
  - Memory capacity: 2 GB or more recommended. Minimum requirement is 1 GB or more (64-bit Windows requires 2 G or more)
  - Hard disk capacity: 200 MB or more spare capacity
  - Display: 1024 x 768 or higher resolution, 65,536 or more colors
  - Interface: USB 2.0
  - All other necessary software environments in addition to WindowsOS
  - .NET Framework version4.0
  - Microsoft Visual C++ 2010 SP1 runtime library

- Development Environments

Product Name	Version
IAR Embedded Workbench for Renesas RX	V2.42.2 or later
GNURX	v12.03 or later

Chapter 4. Changes

This chapter describes change from Applilet for RX V1.00.00 to V1.01.00

No.	Description	version	
		RX111 V1.02.00.04	RX110 V1.02.00.04
1	Change of Data handled by polling	-	-
2	Change of Clock Generator Setting	-	-
3	Addition of PinView	○	○

○ : Correspondence, -: Not correspondence(finish of correction), /: Outside of function

4.1 Details of Changes

4.1.1 Change of Data handled by polling

The selection "Data handled by polling" was eliminated.

- Data processing settings for the serial communication interface (SCI)
- Data processing settings for the serial peripheral interface

This issue has been corrected in V1.01.00

4.1.2 Change of Clock Generator Setting

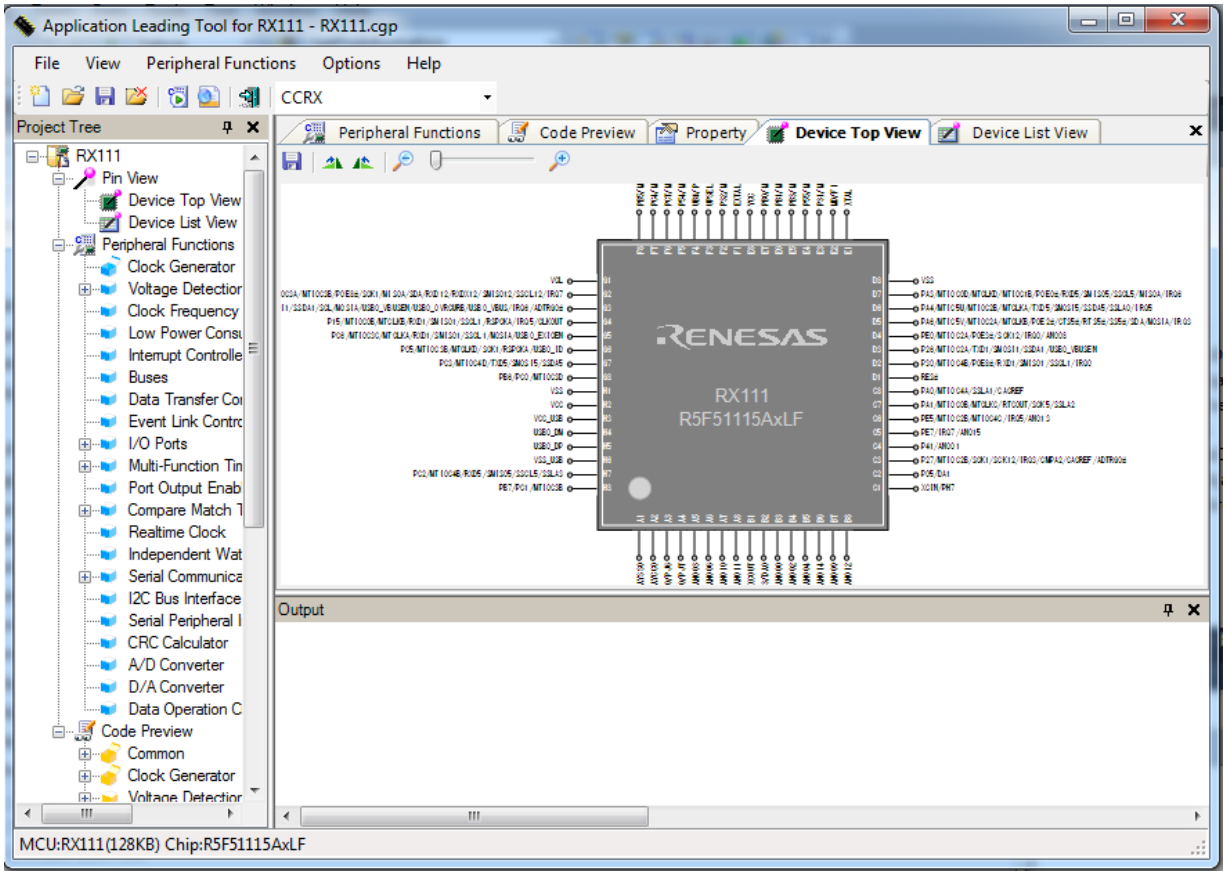
In the clock generator setting, it corrected so that the value exceeding restriction of a device could not be set up.

This issue has been corrected in V1.01.00

4.1.3 Addition of PinView

PinView displays current pin settings by CodeGenerator. There are Device Top View and Device List View.

This issue has been corrected in V1.01.00



Rotate 

Device Top View supports rotate function. It allows user to rotate the Device Top View either in clockwise or anti-clockwise direction in steps of 90 degree.

Zoom 

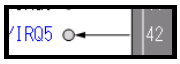
Device Top View supports zoom function. The zoom slider controls the zoom level.

Drag and Move

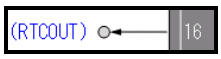
Device Top View supports mouse drags action. Hold down mouse left button on the graph and move will drag the graph around.

Highlight Pins by Peripheral

Device Top View will highlight the group of pins that belongs to the active CG peripheral (macro).

Input / Output (I/O) Direction Display 

Device Top View supports I/O direction of each pin. Input/output direction is indicated by an arrow.

Pin Label Color Highlight 

When pin label is displayed in blue color and indicated with parenthesis, it refers to pin function is configured in CodeGenerator.

Device Top View Output File 

Click on the “Save Device Top View” button on Device Top View toolbar, the Device Top View is saved as an image file, in PNG format.

Configure PinView Color in Property Window

PinView supports for user to change color, through the property window.

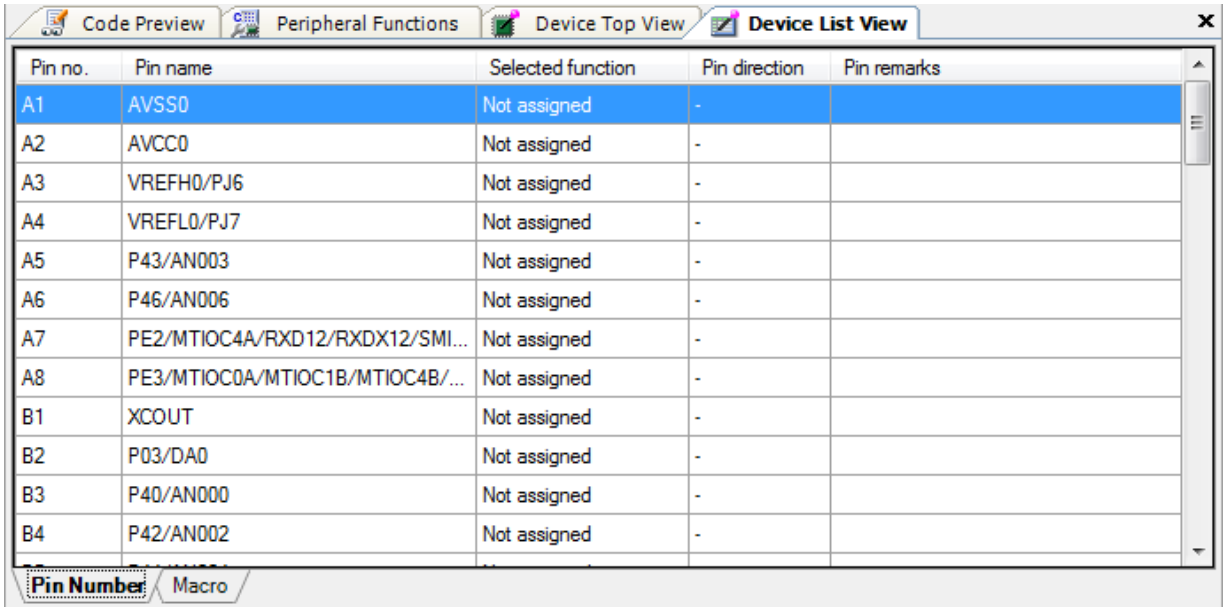
Right click on the Device Top View on project tree, the property window will pop up a right click menu.

Device List View

Device List view displays the pin information in a data grid format. It has two data lists: ‘Pin Number’ and ‘Macro’. Both lists refer to the same pin configuration as shown on the Device Top View.

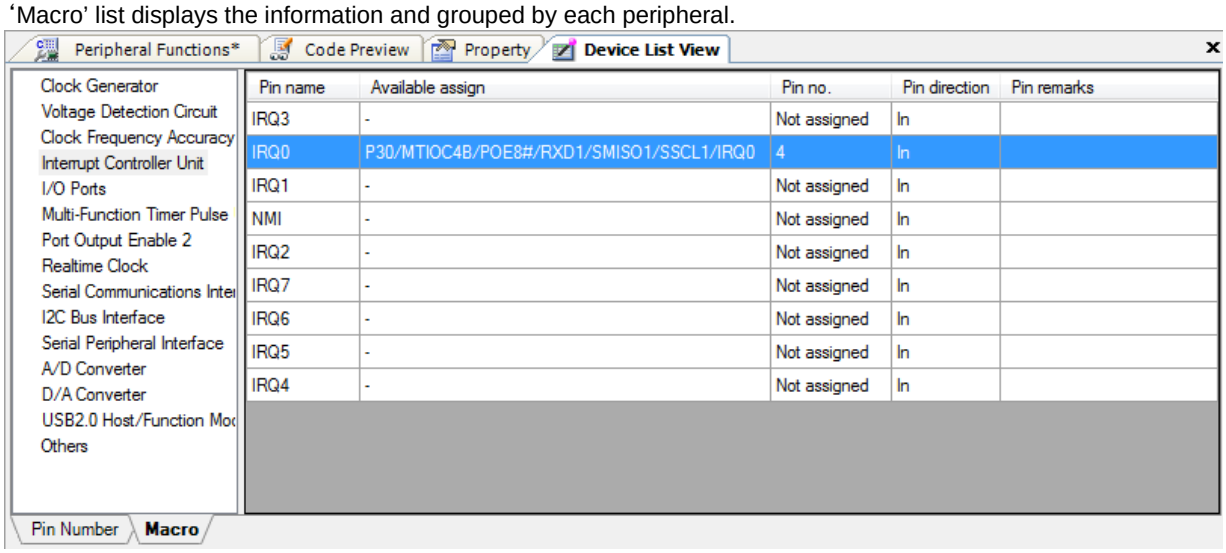
Pin Number List Window

Pin Number list displays current pins configuration pin number.



Macro List Window

'Macro' list displays the information and grouped by each peripheral.



Chapter 5. Cautions

This section describes cautions for using Applilet for RX.

5.1 Cautions List

No	Description	version	
		RX111 V1.02.00.04	RX110 V1.02.00.04
1	Cautions of USB.	○	/
2	Cautions of online Help	○	○
3	Cautions of the IAR Embedded Workbench for Renesas RX V2.42.1	○	○
4	Cautions of Serial Communications Interface Asynchronous Mode	○	○
5	Cautions of Low Power Consumption	○	○

○ : Correspondence, -: Not correspondence(finish of correction), /: Outside of function

5.2 Cautions Details

5.2.1 Cautions of USB

Applilet for RX is not supporting the USB.
[Workaround] There is no workaround.

5.2.2 About online Help

Applilet for RX is not supporting online help.
[Workaround] There is no workaround.

5.2.3 About the IAR Embedded Workbench

In case of IAR Embedded Workbench for Renesas RX V2.42.1, the following functions cause build error.

- Setting of High-speed On-chip Oscillator
- Setting of I/O port (PortH and PortJ)

[Workaround]
Setting of High-speed On-chip Oscillator
Comment out generated line `SYSTEM.HOCOWTCR.BYTE = xxxx;` in a function `void R_CGC_Create(void)`

Example

```
void R_CGC_Create(void)
{


    /* Set HOCO wait time */
    SYSTEM.HOCOWTCR.BYTE = _06_CGC_HOCO_WAIT_CYCLE_266;    // This line

}
```

Setting of I/O port (PortH and PortJ)
There is no workaround.
Please use the IAR Embedded Workbench for Renesas RX V2.42.2 or later.

5.2.4 Cautions of Serial Communications Interface Asynchronous Mode

Applilet is Asynchronization Mode of SCI and is not supporting the MTU clock input .
[Workaround] There is no workaround.

5.2.5 Cautions of Low Power Consumption

Applilet for RX is not supporting Low Power Consumption.
[Workaround] There is no workaround.

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