# RENESAS

# CS+ for CC V8.03.00

## Release Note

Contents

# Chapter 1.    Target Devices

The target devices supported by the CS+ are listed on the Website.
Please see this URL.
CS+ Product Page

                                    https://www.renesas.com/cs+

# Chapter 2.    User's Manuals

Please read the following user's manuals along with this document.

| Manual Name | Document Number |
|---|---|
| CS+ V8.02.00 Installer | R20UT4525EJ0100 |
| CS+ V6.00.00 Editor | R20UT3991EJ0100 |
| CS+ V8.03.00 Python Console | R20UT4584EJ0100 |
| CS+ V5.00.00 Updater | R20UT3942EJ0100 |
| CS+ V8.03.00 Message | R20UT4585EJ0100 |
| CS+ V8.03.00 Project Operation | R20UT4586EJ0100 |
| CS+ V8.01.00 Analysis Tool | R20UT4406EJ0100 |
| CS+ V8.03.00 RH850 Debug Tool | R20UT4589EJ0100 |
| CS+ V8.03.00 RX Debug Tool | R20UT4588EJ0100 |
| CS+ V8.03.00 RL78 Debug Tool | R20UT4587EJ0100 |
| CS+ V8.03.00 GHS CCRH850 Build Tool Operation | R20UT4583EJ0100 |

* GHS: Green Hills Software, LLC

# Chapter 3.    Uninstallation

There are two ways to uninstall this product.
- Use the integrated uninstaller from Renesas (uninstalls all CS+ components)
- Use the Windows uninstaller (only uninstalls this product)

To use the Windows uninstaller, select [CS+ for CC] from [Apps & features] from [Settings] of Windows or [Programs and Features] of the control panel.

# Chapter 4.    Improvements and changes

This chapter describes changes from V8.02.00 to V8.03.00.

## 4.1    Improvements and changes of CS+

### 4.1.1    End of support for Windows 7

Microsoft Corporation will end its free-of-charge support for Windows 7 at January 14, 2020.
In response to this event, Renesas will end the evaluating and guaranteeing the operation of CS+ in the Windows 7 environment and hereafter focus on support for Windows 10 and Windows 8.1.

### 4.1.2    Change to the setting of properties of the build tool when the microcontroller is changed [RX]

Related to the [Change microcontroller ...], a facility has been added so that the build options are automatically adjusted to suit the microcontroller to be changed. The startup source file of the microcontroller to be changed is also copied to the project folder for reference.

### 4.1.3    Improvement to the symptom that may not display the CS+ icon on the taskbar

In case that the Rapid Start is enabled and the CS+ waiting in the task tray, when CS+ is invoked by double-clicking a project file (*.mtpj), the CS+ icon may not be displayed on the taskbar. However, this has been improved.

## 4.2    Additions to the build tool

### 4.2.1    Enhanced support for Renesas compilers [RL78] [RH850][RX]

Support for the following versions of compilers has been added.
- CC-RL V1.09.00
- CC-RH V2.02.00
- CC-RX V3.02.00

### 4.2.2    Improvement to a build option related to the RX V3 core and register bank saving [RX]

The -nobank option is automatically added to projects for microcontrollers which have the RX V3 core but do not have register bank saving. This option leads to an error in the case of an attempt at compilation with a "#pragma interrupt (bank=N)" directive in the source file.

### 4.2.3    Enhanced support for GHS compilers [RH850]

Support for the following versions of the RH850 compiler from GHS has been added.
- 2019.5.5

## 4.3    Improvements to the debug tool

The abbreviations listed below collectively denote the corresponding tools in this section.
OCD (serial):
Serial or FINE interface connection for the E1 emulator, E20 emulator, E2 emulator, and E2 emulator Lite
OCD (JTAG):
JTAG interface connection for the E1 emulator, E20 emulator, E2 emulator, and E2 emulator Lite
OCD (LPD):
LPD connection for the E1 emulator, E20 emulator, and E2 emulator

### 4.3.1    Enhanced support for GHS compilers [RH850]

Support for the following versions of the RH850 compiler from GHS has been added.

● 2019.5.5

### 4.3.2    Addition of a facility for changing the detailed conditions of events [RH850]

A facility for changing the detailed conditions of specified events has been added. For the following events, details of the conditions occurring can be specified.

● Break event (execution type)
● Break event (access type)
● Trace start event / Trace end event
● Point trace event
● Timer start event / Timer end event
● Performance measurement start event / Performance measurement end event

### 4.3.3    Addition of a facility to display data for software tracing [RH850]

A facility has been added so that the data acquired in software tracing are displayed on the [Trace] panel.

### 4.3.4    Addition of a facility for debugging in the initially stopped state and standby mode [RH850]

A facility for debugging in the initially stopped state and in standby mode has been added.

### 4.3.5    Enhancement of products that support the simulation of peripheral modules and current drawn [RL78]

**Applies to:** Simulator for RL78/G10, RL78/G11, RL78/G12, RL78/G13, RL78/G13A, RL78/G14, and RL78/L12

Products that support the simulation of peripheral modules and current drawn have been added.
This enables the simulation of peripheral modules and current drawn in only a virtual environment on a PC, i.e. without having to connect CS+ to the actual MCU (on a board).
The following microcontrollers are currently supported.

• RL78/G13A
• RL78/L12

### 4.3.6    Addition of types of components supported on the [Virtual Board] panel

**Applies to:** Simulator for RL78/G10, RL78/G11, RL78/G12, RL78/G13, RL78/G13A, RL78/G14, and RL78/L12

Support for the following types of component has been added to the [Virtual Board] panel.

• Wireless-charging transmitter
• Infrared receiver

### 4.3.7    Improvement in terms of the help of the [Virtual Board] panel

Operation has been improved so that the help can be displayed from the [Virtual Board] panel. To display the help for the [Virtual Board] panel, select the [Virtual Board] panel window frame and press the F1 key.

### 4.3.8    Improvement to the operation of emulators for the RX23E-A group [RX]

When an E1 or E2 emulator is being used to debug the RX23E-A group, the power-supply voltages have been improved as follows.

● E1 emulator: 3.3 V or 5.0 V
● E2 emulator: 1.8 V to 5.0 V

For details on restrictions applicable to this item, refer to the following URL.
https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ts0492

## 4.4    Improvements to the Python console

### 4.4.1    Addition of a facility for obtaining sample scripts

The facility for obtaining sample scripts which was added in CS+ V8.02.00 has been enhanced and new sample scripts have been added.
To use this facility, select [Python Console] from the [View] menu to open the [Python Console] panel and select the [Sample Scripts] tab on the panel.
Clicking on the title of a sample script shows a description of the script.
In addition, clicking on the [Add to project] button registers the script file with the active project.

### 4.4.2 Improvements to the operation in using the [Add to project] button to register script files

- The operation has been improved in the terms of overwriting existing files having the same name by clicking on the [Add to project] button.
- The effect of multiple script files being displayed in a project tree has been improved.
- The effect of the [Add to project] button being disabled after clicking on a link has been improved.

### 4.4.3 Improvement to the display of the results of Python script execution

When you execute a Python script by selecting [Execute in Python Console] from the context menu for a script file (*.py) registered in the project tree, the [Console] tab is now automatically activated (previously it was not).

### 4.4.4 Addition of Python functions

The following Python functions have been added.

| Function Name | Functional Overview |
|---|---|
| debugger.Interrupt.RequestEI | Sends an EI-level interrupt request to the interrupt controller. [RH850 simulator (G4MH)] |
| debugger.Interrupt.RequestFE | Sends an FE-level interrupt request to the interrupt controller. [RH850 simulator (G4MH) |
| debugger.Interrupt.RequestFENMI | Sends an NMI request to the interrupt controller. [RH850 simulator (G4MH)] |
| debugger.RecoverSWAS | Recovers the Switch Area Status. [RH850 G4MH] [E2/IE850A] |
| TraceInfo.CreateOtherDict | Converts the value of TraceInfo.Other into the dict type. |

### 4.4.5 Addition to the capabilities of Python functions

The following capabilities have been added to the listed Python functions.

| Function Name | Functional Overview |
|---|---|
| debugger.Trace.Get | Information has been added to the members of TraceInfo return values. |
| debugger.XTrace.Dump | |
| debugger.SoftwareTrace.Get | Information has been added to the members of SoftwareTraceInfo return values. |
| debugger.SoftwareTraceLPD.Get | |

### 4.4.6 Addition of a return values for a Python function

The following return values for a Python function has been added.

| Function Name | Newly Added Return Value | Description |
|---|---|---|
| debugger.GetCpuStatus | DeepStop | In the deep stop mode |
| | CyclicRun | In the cyclic run mode |
| | CyclicStop | In the cyclic stop mode |
| | CyclicDisable | The state of cores other than the main core when the main core is in the cyclic run mode or cyclic stop mode |

### 4.4.7 Correction of a problem with the settings of debugger.SoftwareTraceLPD.RecordingMode

The problem of the TraceMode.FullBreak and TraceMode.FullStop settings of the debugger.SoftwareTraceLPD.RecordingMode function being reversed in operations has been corrected.

## 4.5 Improvement to the facilities of the I/O header file generation tool

### 4.5.1 Improvement by eliminating unnecessary arrays of modules [RH850]

When [Yes (-modulearray=on)] was selected for [Enable module array option] in the [I/O Header File] category on the [I/O Header File Generation Options] tabbed page in the [Property] panel of the build tool and an I/O header file was generated, modules were placed in arrays even in cases where the numbers at the ends of the module names were out of sequence. However, this problem has been rectified so that modules are not placed in arrays if the numbers at the ends of module names are not in sequence.

## 4.6 Improvement to the CS+ Update Manager

### 4.6.1 Improvement on a potential problem when updating is checked

The potential problem of the update manager being abnormally terminated if the amount of information in the update manager is increased has been corrected.

# Chapter 5.    Points for Caution

This section describes points for caution regarding CS+.

## 5.1    Points for caution regarding CS+ (general)

### 5.1.1    File names
The following rules apply to folder and file names.
・ Folder and file names
   Do not use folder or file names that cannot be created from Windows Explorer.
   Network path names cannot be used. Include the drive names to which paths are allocated.
・ Source file names, load module file names, and project file names
   File names consist of the characters a-z, A-Z, 0-9, the period (.), the underscore (_), plus sign (+), and
   minus sign (−).
   File names cannot start or end with a period (.).
   Filenames cannot start with a plus sign (+) or minus sign (−).
   CS+ is not case-sensitive to file names.
   File names may have up to 259 characters, including the path.
   Do not use source files with the same file name. Even if they are on different paths, CS+ cannot
   classify them.
・ File names other than the above
   File names comply with Windows conventions.
   Note that the following characters cannot be used in file names.
   \ / : * ? " < > | ;
   File names cannot start or end with a period (.) or space.
   CS+ is not case-sensitive to file names.
   File names may have up to 259 characters, including the path.
・ Folder names
   Folder names comply with Windows conventions.
   Note that the characters below cannot be used in file names.
   ( ) , =

### 5.1.2    Panel display
If your hardware environment does not meet the recommended specifications for CS+, the [Property] panel
may appear small and have scrambled contents.
If this happens, move the [Property] panel outside the split panel area.
・ Enable [Dockable], and make it a docking panel
・ Enable [Floating], and make it a floating panel

### 5.1.3    Problem with a Windows update program
Depending on the Windows update program, starting the CS + for CC in Windows 8.1 may cause an error
or the PC to crash.
In this case, do any of the followings.
・install the latest VC++ 2015 runtime (x86 version)
・apply the latest Windows update program

### 5.1.4    [Editor] panel
・ When a variable or label is selected and the Jump to Function feature is used from the context menu,
   execution does not jump to the variable or label.
・ The following notes apply to the editor, when source files with the same name but from different folders
   are registered with a main project and a sub project, and load modules from both the main project and
   sub project are downloaded.
   ➢ The address of the main project is displayed on the file.
   ➢ At jumping to a source file from disassembled code, the file registered with the main project is
      opened.
   ➢ If the file is opened from either project, only one file will be opened.

・ On Windows 8.1 and Windows 10, the display may become unclear due to anti-aliasing.
・ When saving a file in the [Save As] dialog box, the extension listed at the top of the [Save as type] drop-down list is automatically added unless another extension is specified. Note however, that an extension is not added when a file name is input with an extension that is selected in the [Save as type] drop-down list or with an extension that is registered with Windows. When an automatically added extension is not as expected, modify the name of the file by using, for example, Explorer.
・ Printing the contents of the Editor panel is not possible in an environment with .NET Framework 4.6 installed. To do so in that case, use an editor other than that of CS+.

### 5.1.5      Creating new projects

**Applies to:** RX

If a new project is created by selecting [Empty Application[CC-RX]] under the environment for the RX, building the project may lead to the following errors.

    \*\* L2132 (E) Cannot find "D" specified in option "rom"
    \*\* L2132 (E) Cannot find "D_1" specified in option "rom"
    \*\* L2132 (E) Cannot find "D_2" specified in option "rom"

If you encounter these errors, change the setting of [ROM to RAM mapped section] on the [Link Options] sheet in CS+.

### 5.1.6      Tutorials

The Code Generator Plug-in, Pin Configurator Plug-in and Program Analyzer Plug-in are used in tutorials. Enable them through the [Plug-in Manager] dialog box.

### 5.1.7      Starting multiple instances of CS+

Two or more instances of CS+ can be started on the same host machine, but if you do so, take note of the points listed below.

・ When two or more instances of CS+ are started, the most recent information to have been written is saved in the information file for each user's own PC.
・ When two or more instances of CS+ are started, the most recent information to have been written is saved in the information file for the stack analysis tools (including CallWalker).
・ When the same project file is used in two or more instances of CS+, the most recent information to have been written is saved.
・ When the same project file is used in two or more instances of CS+, do not attempt building from more than one instance at the same time since the names of the output files will be identical.

### 5.1.8      Loading projects by using earlier versions of CS+

If the version of CS+ being used to load a project is earlier than the CS+ version with which the project was created, some settings may be cleared since the earlier versions of CS+ do not recognize them.

### 5.1.9      .NET Framework from Microsoft Corporation

CS+ outputs the following message and is closed if the version of the .NET Framework you are using is earlier than 4.5.2.

    E0200010
      Failed to launch this product.
      Please install the Microsoft .NET Framework 4.5.2 or later on this PC.

In such cases, obtain version 4.5.2 or a later version of the .NET Framework from the Web page of Microsoft Corporation and install it before starting up CS+ for CC.
Note that the update manager for CS+ for CC is not usable for updating the .NET Framework.

### 5.1.10      Dual-bank function of the code flash memory

**Applies to:** RX65N/RX651-2M Group

Products of the RX65N and RX651 groups with 2 or 1.5 MB of ROM support the dual-bank function of the code flash memory. In CS+, you can select the linear or dual mode during the process of setting up a project.
In use of dual mode, select the type name with "_DUAL".

### 5.1.11      Smart Manual

**Applies to:** RX, RL78

When the Smart Manual does not support the target MCU of an open project, the user's manuals are not displayed.

### 5.1.12     CS+ Partner OS Aware Debugging Plug-in

**Applies to:** RL78, RX

When CS+ is started with the CS+ Partner OS Aware Debugging Plug-in enabled and by using CubeSuite+.exe (without the Main window), the error message "(0202002) Opening a project failed." is returned.

This can be avoided in either of the following ways.

- Start CS+ by specifying an option to prevent reading of the CS+ Partner OS Aware Debugging Plug-in for CubeSuite+.exe.
  Example: CubeSuite+.exe /np PartnerOS ...
- Turn off the CS+ Partner OS Aware Debugging Plug-in before starting CS+ with CubeSuite+.exe (without the Main window).

How to turn off the plug-in:

Start CS+ (with the Main window) or CubeSuite+ (CubeSuiteW+.exe).

Select [Plug-in Setting...] from the [Tool] menu to display the [Plug-in Manager] dialog box.

Deselect the [CS+ Partner OS Aware Debugging Plug-in] checkbox.

### 5.1.13     RX72M

When creating a new RX72M project, there are differences between the register definition contents of iodefine.h and the contents of the RX72M User's Manual.

Applicable iodefine.h file version is V1.00A and earlier.

1.  Error : unsigned short ACKCMDER:1;
    Correct : unsigned short ACKCMDERR:1;
2.  Error : unsigned long PSADR:19;
    Correct : unsigned long PSADR:17;

### 5.1.14     Mentions of "R8C" in user's manuals and online help

"R8C" is mentioned in the user's manuals and online help, but CS+ does not support the R8C family.

## 5.2     Points for caution regarding build tools

### 5.2.1     Build option import

Build option import fails if setting the value of "Select modules which are output in files" property in the "I/O Header File Generation Options" tab in Build tool property to "Yes" in the project in import destination/source and importing.

Set the value of "Select modules which are output in files" property to "No" in the project of the import destination, and save the project. Then, import the build option after opening the project again.

### 5.2.2     Build mode

In the [Build Mode Settings] dialog box, the build mode can be duplicated or renamed with different names in terms of upper- and lower-case letters from those of the existing name of the build mode.

Usually, the name of a build mode is that which has been specified for the [Intermediate file output folder] property on the [Common Options] tabbed page of the [Property] panel of the build tool or that which has been specified for the [Output folder] property on the [Link Options] tabbed page or [Hex Output Options] tabbed page. Note that the output destinations of two build modes having names that differ in terms of upper- and lower-case letters will be the same unless the following step is taken. Avoid this problem by specifying different folder names for the [Intermediate file output folder] and [Output folder] properties.

## 5.3     Points for caution regarding design tools

### 5.3.1     Saving projects

If you save a project that has sub-projects while the [Device Top View] or [Device Pin List] panel is open, then the device top view and device pin list of the main project will always appear.

## 5.4    Points for caution regarding debugging tools

The abbreviations listed below collectively denote the corresponding tools in this section.

OCD (serial): E1 Emulator (serial), E20 Emulator (serial)

OCD (JTAG): E1 Emulator (JTAG), E20 Emulator (JTAG)

### 5.4.1    Adding sub-projects
**Applies to:** Common to all debugging tools and devices
If you add a sub-project while a debugging tool is connected, downloading and so on may fail. Only add sub-projects while the debugging tool is disconnected.

### 5.4.2    Assigning unions to registers
**Applies to:** All debugging tools for RX
When a union is assigned to a register, it is assumed that the members of the union are assigned to the lower-order bytes of the register. For this reason, the values of the members will be incorrect when displayed as big endian.

### 5.4.3    Functions with the same name and char-type parameters
**Applies to:** All debugging tools for RX
When three functions with char-type parameters are defined as shown below, the address of "Func(signed char)" will not be displayed (i.e. the address of "Func(char)" will be displayed instead).
    void Func(char);
    void Func(signed char);
    void Func(unsigned char);

### 5.4.4    Changing the priority section among overlaid sections
**Applies to:** All debugging tools for RX
Changing the priority section among overlaid sections is not immediately reflected in debugger operations.
To update the display of addresses in the editor, for example, you need to close the file and open it again.
To update the display of variables in the [Watch] panel, execute a single step of the program.

### 5.4.5    Linkage options of CC-RX
**Applies to:** All debugging tools for RX
CC-RX does not support the '-sdebug' linkage option.
Please set [Outputs debugging information] in the [output] category of the [Link Options] tabbed page to '-debug'.

### 5.4.6    Breakpoints in for statements or inline-expanded functions
**Applies to:** All debugging tools for all devices
If a line of C source code includes any of the functions or statements listed below, the instruction is placed at two or more addresses. However, the editor panel shows only one of the addresses.
In cases where a breakpoint is set on this line, the program stops only when the instruction at the address being displayed on the editor panel is executed.

   1. Inline-expanded function (*)
   2. Template function
   3. First line of a for or do-while statement
   * Includes those inline-expanded by optimization

### 5.4.7    Notice of the project of dual mode
**Applies to**: All debugging tools for RX65N-2M, RX651-2M group
In case of a project of a dual mode of a device with less than 1.5 MB of ROM size, a gap exists during the address of the ROM in bank 0 and bank 1.
But data in a gap exists in the following function.
・ Memory panel

・ Watch panel

・ Disassemble panel
[E1/E20/E2/E2Lite]
Read result is 0x00, Write is ignored.
[Simulator]
Read and Write operate correctly.

### 5.4.8    Notice regarding the IE850A
**Applies to:** IE850A for RH850

Values larger than 512 K can be specified for the [Trace memory size [frames]] property. If such values are specified, however, only the latest 512 Kbytes of trace data will be used in the display of the [Trace] panel and in the Python console.

### 5.4.9      Simulation of peripheral modules

**Applies to:** Simulator for RL78/G10, RL78/G11, RL78/G12, RL78/G13, RL78/G13A, RL78/G14, and RL78/L12

Operation of CS+ may be incorrect if the user program or a debugging operation makes settings of the SFR which are prohibited in the user's manual for the target device.

### 5.4.10     Release from the HALT mode in the peripheral simulator

**Applies to:** Simulator for RL78/G10, RL78/G11, RL78/G12, RL78/G13, RL78/G13A, RL78/G14 and RL78/L12

In the simulator, the user program is released from the HALT mode in response to any of the following debugger operations.

- Changing the frequency of the main clock or sub-clock on the [Connect Settings] tabbed page of the Property panel while the user program is stopped
- Changing the value of the high-speed on-chip oscillator frequency selection register (HOCODIV), middle-speed on-chip oscillator frequency selection register (MOCODIV)[Note], or subsystem clock selection register (CKSEL)[Note] in the clock generator
- Writing to the clock operating mode control register (CMC), system clock control register (CKC), or subsystem clock supply mode control register (OSMC) in the clock generator

Note: For RL78/G11 simulator only

# Chapter 6.    Restrictions

This section describes restrictions on CS+.

## 6.1    Restrictions imposed by debugging tools

The abbreviations listed below collectively denote the corresponding tools in this section.
OCD (serial):
Serial or FINE interface connection for the E1 emulator, E20 emulator, E2 emulator, and E2 emulator Lite
OCD (JTAG):
JTAG interface connection for the E1 emulator, E20 emulator, E2 emulator, and E2 emulator Lite
OCD (LPD):
LPD connection for the E1 emulator, E20 emulator, and E2 emulator

### 6.1.1    List of restrictions imposed by debugging tools

| No. | Target tool | Target device | Description | Remarks |
|---|---|---|---|---|
| 1 | All debugging tools | RL78, RX, RH850 | Division of load modules | |
| 2 | All debugging tools | RL78, RX, RH850 | Display of information on variables | |
| 3 | All debugging tools | RL78, RX, RH850 | Source files with the same name | |

### 6.1.2    Details of restrictions imposed by debugging tools

No.1 Division of load modules
**Applies to:** All debugging tools for RL78, RX, RH850
**Description:** The restrictions below apply when the CC-RH compiler is used to generate split load modules from a program.
    a. Source-level debugging becomes impossible.
    b. The second and subsequent output files are not automatically registered with the debugging tool.
**Workaround:** There is no workaround.

No.2 Display of information on variables
**Applies to:** All debugging tools for RL78, RX, RH850
**Description:** If two or more variables defined in a function have the same name, the values of variables that can be viewed when the program has stopped may differ from the expected values. Whether this phenomenon arises depends on the optimization level* selected during the process of compilation.
  Note: The optimization level can be set via [Build Tool] – [Common Options] – [Frequently Used Options (Link)].

[Example] In the example below, char-type variable "a" is in the innermost scope at (*1) and int-type variable "a" is in the innermost scope at (*2). Under some conditions, however, only the value of one of the variables will be visible at (*1) and (*2).

```
void main()
{
    int a = 100;
    {
        char a = 'A';
        a++; <-(*1)
    }
    a++; <-(*2)
}
```

·   Display of (*1) in the [Watch] panel
     "a"         'A' (0x41)   "signed char"   "0xfefb1004" // Expected value
  or  "a"   100 (0x00000064)  "int"       "0xfefb1000"
·   Display of (*2) in the [Watch] panel
     "a"         'B' (0x42)   "signed char"   "0xfefb1004"
  or  "a"   100 (0x00000064)  "int"       "0xfefb1000" // Expected value
Condition: Optimization other than for debugging at the time of compilation.

**Workaround:** Select [Optimize for Debugging] as the optimization level before compilation.


No.3 Source files with the same name
**Applies to:** All debugging tools for RL78, RX, RH850
**Description:** When two or more files with the same name exist in a load module being debugged, line
addresses are not displayed correctly in the editor. Setting of events also does not work correctly.


Example:
C:¥Work¥CS+¥ProjA¥ProjA.mtpj¥Src¥main.c -> A.abs
C:¥Work¥CS+¥ProjB¥ProjB.mtpj¥Src¥main.c -> B.abs
This is a case where the above two load modules are being debugged simultaneously.


Note: Although multiple load modules are used in the above example, this restriction is also applicable
to cases where a single load module is in use.


[Conditions] The relative paths to the files from the compilation directory are the same (including the
filenames).
Building by CS+
Project file directory (*.mtpj) = compilation directory
Building by using a makefile
Current directory = compilation directory


**Workaround:** Source files with the same name can be distinguished in either of the following ways.
a. Change the configuration of the folders so that the relative paths to the files from the compilation
directory differ.
Before: ProjA¥Src¥main.c
ProjB¥Src¥main.c
After:    ProjA¥SrcA¥main.c
ProjB¥SrcB¥main.c
With this change, the relative paths will be as follows.
"SrcA¥main.c"
"SrcB¥main.c"
b. Change the names of the source files so that all of the files to be debugged have unique names.
Before: ProjA¥Src¥main.c
ProjB¥Src¥main.c
After:    ProjA¥Src¥mainA.c
ProjB¥Src¥mainB.c