

*Figure 1. SKP38602*

## 1. StarterKit Plus Software Install

Do not connect hardware to your computer until the software has been installed.

- a) Please insert the enclosed CD into your computer's CD-ROM drive. The CD should auto-start, displaying the SKP Picker Install Screen. Follow the directions in the installation windows to install the Renesas tools. It is recommended you select all default install options.
  - i) If the installation screen does not appear, please browse the CD root folder and double-click on "SKP-Installer.exe".
    - Do not plug the E8 Debugger into your USB port until instructed to in Section 2, USB Driver Installation.
    - During the installation process, you may be prompted to restart your computer. Do not restart until the SKP installer has completed installation of all of the software items.
    - During the SKP install, dialog boxes will appear asking if you would like to install the development tools or not. The development tools will allow you to evaluate the different features of the H8/Tiny MCU and the software development environment (debugger, compiler, linker, etc.).
    - Also during the installation process, the AutoUpdater installer will launch. Do not configure until all tools have been installed and the "Installation Complete" window is displayed.
  - ii) The install process installs HEW into the "c:\Program files" folder, copies all SKP information and sample projects into "c:\Renesas\SKP38602", and creates the folder "c:\Workspace".

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## 2. USB Driver Installation


When you connect the E8 Debugger to your computer for the first time, Windows will recognize this new device and will request the driver. Follow the steps below to install the driver. Administrator privileges are required to install the driver on a Windows 2000/XP machine.

- a) Connect the SKP as shown in Figure 1, and connect the USB cable to your PC.
- b) Verify that the Green LED (“ACT”) is on. If not, check the connection.
- c) If using Windows 2000, no intervention by the user is needed. When the E8 is plugged in, Windows automatically attaches the correct driver for your device and it is ready to use. Skip to step 2.e).
- d) If using Windows XP, the first time an E8 device is plugged into a different USB port the Windows XP “Found New Hardware Wizard” window will appear.
  - i) If Windows asks you to connect to “Windows Update”, select “No, not this time”.
  - ii) Select the option “Install the software automatically (recommended)”. Windows will then begin installing the USB driver.
  - iii) Another screen will probably appear stating that this driver has not been XP certified by Microsoft. Click the “Continue Anyway” button. (We did not participate in Microsoft XP driver certification program.)
  - iv) When the driver is installed, you will be able to click “Finish” to close the wizard.
- e) If Windows does not automatically find the driver, they are located in: C:\Windows\System32\driver.

*NOTE: If you have problems installing the driver or your PC will not recognize the E8, please see the SKP38602 User’s Manual for troubleshooting information.*

## 3. HEW Workspace



HEW integrates various tools such as the compiler, assembler, debugger and editor into a common graphical user interface. To learn more on how to use HEW, open the HEW manual installed on your computer (Start Menu > All Programs > Renesas > High-performance Embedded Workshop > Manual Navigator).

- a) Launch HEW from the Start Menu. (Start Menu > All Programs > Renesas > Renesas High-performance Embedded Workshop).
- b) In the “Welcome” dialog box: Verify “Create New Workspace” is selected. Click <OK>.
- c) In the “New Project Workspace” dialog box: Set the “CPU Family” to “H8S, H8/300”, and verify the “Tool chain” is set to “H8S, H8/300 Standard”. Select “H8/38602 Starter Kit Plus” from the left hand pane.
- d) Enter “38602Demo” for the Workspace. The project name will be automatically completed with the Workspace name. Click <OK>.
- e) On the next window, select “Verify”, click <Next>.
- f) On the “H8/38602 – Step 2” window: Click <Finish>.
- g) On the Project Generator Information window: Click <OK>. The project that is created has two configurations. The “Release” configuration can be used for the final release code version and by default, the executable does not include debug information. The “Debug” configuration allows full source level debugging within HEW.
- h) Select the Debug build configuration in the left hand drop down list on the tool bar. (Figure 2)
- i) Click on the “Build” icon  to compile, assemble and link the project.



**Figure 2.**

## 4. HEW Debugging

- a) Select “SessionH8\_Tiny\_SLP\_E8\_System” in the right hand drop down list on the tool bar. (Figure 3)
  - b) Select the H8/38602RF. (Figure 4)
  - c) Select “Download emulator firmware”.
  - d) Click <OK>.
  - e) The first time the E8 is used, you are asked to choose the driver. (Figure 5)
  - f) Click <OK>.
  - g) Select “Renesas E-Series USB Driver”. The “Details” items will autofill within a few seconds. (Figure 6)
  - h) Click <Close>.
  - i) Accept any dialogue warning that an older version of E8 firmware is necessary to work with the application.
  - j) Select “Power supply is carried out”. (Figure 7)
  - k) Select “3.3V” <OK>.
- WARNING! The H8/38602 MCU is a 3.3 volt device – applying +5VDC to this device will destroy it!**
- l) Enter 9.83 for clock frequency and click <OK>.
  - m) Enter “00E8” for ID code and click <OK>. (Figure 8)  
HEW is now connected to the SKP board and the green Power LED should be on.
  - n) Under the “Debug” menu item, select “Download Modules > All Download Modules”. Or, right click on the “.abs” file in the left (Workspace) window.
  - o) Click the <Reset – Go> icon.  The code will run, and you will see the LEDs flash on the board.
  - p) Click the <Stop> icon.  The code will stop, and the source code will be opened at the current program counter address.

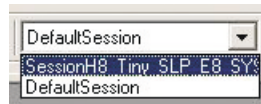


Figure 3.



Figure 4.



Figure 5.



Figure 6.

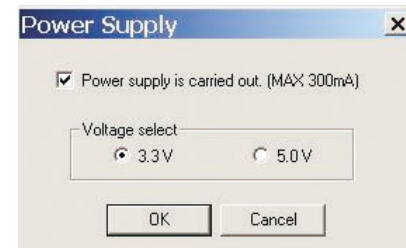


Figure 7.



Figure 8.

## 5. Next Step

After you have completed this quick-start procedure, please review the tutorial code and sample code that came with the kit. The tutorials will help you understand the device and development process using Renesas Development Tools. The tutorials and all SKP documents can be found via the start menu:

Start > (All) Programs> Renesas> SKP38602 > All Documents.

The Hardware manual supplied with this SKP is current at the time of publication. Please check for any updates to the device manual from the Renesas internet site at: [www.renesas.com/skp](http://www.renesas.com/skp).

## 6. Renesas H8S, H8/300 Compiler

The version of the compiler provided with this SKP is fully functional but time limited. You have 60 days to evaluate the full product before the compiler will limit the code linker to 64Kbytes. The full licensed version is available from your Renesas supplier.

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## 7. Support

Online technical support and information is available at: [www.renesas.com/skp](http://www.renesas.com/skp)

Technical Contact Details:

America: [techsupport.rta@renesas.com](mailto:techsupport.rta@renesas.com)

Europe: [tools.support.eu@renesas.com](mailto:tools.support.eu@renesas.com)