## How to install GNU tool for H8S/2212

## 1. Introduction

This document describes the procedures for installing GNU tool used to compile micro T-Kernel for H8S/2212. You can create micro T-Kernel that can run on the board equipped with H8S/2212, by building micro T-Kernel reference code distributed from T-Engine Forum with this tool.

## 2. Notes

We only assume that this GNU tool is used to create micro T-Kernel that can run on the board equipped with H8S/2212. The usage of this tool for other intended purposes is not assumed. T-Engine Forum does not support this tool.

# 3. Installation Procedures

# 3.1 Install Cygwin<sup>(TM)</sup>

This GNU tool runs on Cygwin which is UNIX emulator on Windows. Please refer to Cygwin Web page (<a href="http://www.cygwin.com/">http://www.cygwin.com/</a>) to install Cygwin. Select make (in Devel category) together, in addition to the package for installation which is selected by default.

### 3.2 Install GNU tool

#### Notes:

If files already exist under /usr/local/h8300-elf-4.1 directory, please take actions such as changing the directory name beforehand to prevent overwriting files by mistake due to the installation of this tool.

## (1) Install GNU tool

Copy the archive file (devenv\_h8300-elf-4.1.tgz) downloaded from Web page to /usr/local directory, and then extract it as follows. As a result, GNU tool is installed under /usr/local/h8300-elf-4.1 directory.

```
$ cd /usr/local
$ tar xzf devenv_h8300-elf-4.1.tgz
```

## (2) Configure environment variables

Define the following environment variables in accordance with the environment to be used after installing GNU tool.

BD Base directory of micro T-Kernel

Set the directory in which micro T-Kernel was installed.

Example) /usr/local/te/utkernel source

GNUs GNU-related tool

Specify the directory in which GNU make exists. Specify /usr if make exists in /usr/bin.

GNU\_BD Base directory of GNU-related tool for cross development

Example) /usr/local/h8300-elf-4.1

GNUh8300 Directory of GNU-related tool for H8S/2212

Example) \$GNU BD/h8300-elf

GCC\_EXEC\_PREFIX gcc-related directory

Set the directory of GNU-related tool for H8S/2212

included in development environment. Set \$GNU BD/lib/gcc normally.

As for the subsequent procedures, please refer to "micro T-Kernel Source Code Manual" (utkernel\_en.txt).

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