

How to install GNU tool for Cortex-M3

1. Introduction

This document describes the procedures for installing GNU tool used to compile micro T-Kernel for Cortex-M3. You can create micro T-Kernel that can run on SK-FM3-48PMC-USBSTICK, 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 SK-FM3-48PMC-USBSTICK. 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^(TM)

This GNU tool runs on Cygwin^(TM) which is UNIX emulator on Windows^(®). Please refer to Cygwin Web page (<http://www.cygwin.com/>) 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/cortex-m3` 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_cortex-m3.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/cortex-m3` directory.

```
$ cd /usr/local
$ tar xzf devenv_cortex-m3.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) <code>/usr/local/te/utkernel_source</code>
GNU_BD	Base directory of GNU-related tool for cross development Example) <code>/usr/local/cortex-m3/ tool/Cygwin-i686</code>
GNUARM_2	Directory of GNU-related tool for Cortex-M3 Example) <code>\$GNU_BD/arm-none-eabi</code>

As for the subsequent procedures, please refer to “micro T-Kernel Source Code Manual” (`utkernel_en.txt`).

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