

CrossCompiling

Recommended Method

Sourcery G++ Lite for SuperH Processors

- Renesas supports the development and use of the Sourcery G++ Lite for SuperH toolchain produced by CodeSourcery.
<http://www.codesourcery.com/sgpp/lite/superh>
- For assistance from the community with this toolchain:
 - Forum: GNU Toolchain for SuperH Linux
- For direct support for Sourcery G++ Lite for SuperH, please see:
 - SuperH FAQ
 - https://sourcery.mentor.com/sgpp/lite/superh/portal/target_arch?@action=faq&target_arch=SuperH
 - SuperH Discuss Mailing List
 - <http://sourcerytools.com/cgi-bin/mailman/listinfo/superh-gnu-discuss>

How-Tos and Examples

Speeding up cross-compiling with ccache and distcc on Debian

<http://blog.kfish.org/2010/06/speeding-up-cross-compiling-with-ccache.html>

Alternative Methods

Scratchbox <http://www.scratchbox.org/>

Gives you the tools to run the configure scripts on the target but build on the host.

- (+) Probably best tool in the long run (once you got it properly configured)
- (+) You can compile programs just like you do for your standard x86 (configure, make, make install)
- (-) Requires a prebuilt toolchain before you can start
- (-) Requires more knowledge
- (-) Debian based (if you got Debian as host-system then good, otherwise bad)

OpenEmbedded

http://www.openembedded.org/wiki/Main_Page

With little effort you can make openembedded create packages for you simply by putting your CPU information in a config file (machine file).

- (+) Extremely easy to get going
- (+) Compiling the available packages almost always works
- (+) Easy to create a standard user-land (and porting it to other CPU arch's)
- (-) Limited amount of packages (can create your own but requires some skill & knowledge)
- (-) Only way of controlling the build is to edit the build package, no real interaction

Crosstool

A set of scripts that build a working toolchain for you (to be used on the host machine).

- (+) Requires a minimal set of skill to get the toolchain compiled
- (+) Easy to upgrade
- (-) After toolchain is finished it's quite hard to start cross compiling (need to set all paths/libs yourself)
- Instructions: How to use crosstool to build an SH toolchain

Build Everything Yourself

Best way to learn? Well download sources and start fixing!

- (+) Best way to learn
- (+) If you get the toolchain to work then you will probably not have any problems compiling anything else
- (-) Damn hard! Requires hardcore Linux knowledge