

## Chapter 7 Start Introduction Embedded Linux Application Development

This section show simple embedded Linux development and example, how to write and compile Linux applications, and download to the development board and running, and describes how to create and load the driver module, as well as some of the common open source software migration.

This paper has some detail to the frequently used method of embedded Linux, wonderful world for you to open the door.

Note: You can follow by example program and uses the compiler arm-linux-gcc-4.3.2 with EABI, if you use other versions of the cross-compiler, may not be compiled and run on the development board.

Check the cross-compiler version of the type, can run the command in a terminal: arm-linux-gcc -v, as shown in figure.



```
root@tom:/opt/FriendlyARM/mini2440/linux-2.6.32.2
File Edit View Terminal Tabs Help
[root@tom linux-2.6.32.2]# arm-linux-gcc -v
Using built-in specs.
Target: arm-none-linux-gnueabi
Configured with: /scratch/julian/lite-respin/linux/src/gcc-4.3/configure --build=i686-pc-linux-gnu --host=i686-pc-linux-gnu --target=arm-none-linux-gnueabi --enable-threads --disable-libmudflap --disable-libssp --disable-libstdcxx-pch --with-gnu-as --with-gnu-ld --enable-languages=c,c++ --enable-shared --enable-symvers=gnu --enable-__cxa_atexit --with-pkgversion='Sourcery G++ Lite 2008q3-72' --with-bugurl=https://support.codesourcery.com/GNUToolchain/ --disable-nls --prefix=/opt/codesourcery --with-sysroot=/opt/codesourcery/arm-none-linux-gnueabi/libc --with-build-sysroot=/scratch/julian/lite-respin/linux/install/arm-none-linux-gnueabi/libc --with-gmp=/scratch/julian/lite-respin/linux/obj/host-libs-2008q3-72-arm-none-linux-gnueabi-i686-pc-linux-gnu/usr --with-mpfr=/scratch/julian/lite-respin/linux/obj/host-libs-2008q3-72-arm-none-linux-gnueabi-i686-pc-linux-gnu/usr --disable-libgomp --enable-poison-system-directories --with-build-time-tools=/scratch/julian/lite-respin/linux/install/arm-none-linux-gnueabi/bin --with-build-time-tools=/scratch/julian/lite-respin/linux/install/arm-none-linux-gnueabi/bin
Thread model: posix
gcc version 4.3.2 (Sourcery G++ Lite 2008q3-72)
[root@tom linux-2.6.32.2]#
```