# GCC 4.2 Preview Build[#](#)

Download the latest stable build of the QNX port for GCC 4.2, and experiment with its new features. Please provide your feedback using the [Core Development Tools Forum](#).

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## What's new?[#](#)

### GCC 4.2.1 port[#](#)

- New C parser (available in gcc 4.1 and newer). Yacc-based C parser was replaced with a faster hand-written parser.
- New C++ parser (availble in gcc 3.4 and newer). g++ is now much closer to full conformance to the ISO/ANSI C++ standard.
- New optimization framework based on SSA. New code transformations include dead store elimination, constant propagation, value range propagation, load and store motion, strength reduction and many more.
- Optimized ARM floating point emulation routines.
- Support for precompiled headers (requires updated qcc).

### Binutils 2.17 port[#](#)

- Support added for ARM V6.
- Support added for ARM VFP floating-point instruction set.
- Support added for SH4a and variants.
- Support added for SSE3 instructions.

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## Installation Instructions[#](#)

To install the GCC 4.2 preview:

1. If you haven't done so yet, download and install QNX Momentics 6.3.2. A 90-day evaluation version and perpetual non-commercial licenses are available [here](#).
2. Download GCC 4.2 from the [Project Download area](#). If you have a Windows host, download win32-gcc-4.2.1.zip. If you have a Linux host, download linux-gcc-4.2.1.tar.gz. If you have a Neutrino host, download the nto-gcc-4.2.1.tar.gz.
3. Download Binutis 2.17 from the [Project Download area](#). If you have a Windows host, download win32-binutils-2.17.zip. If you have a Linux host, download linux-binutils-2.17.tar.gz. If you have a Neutrino host, download the nto-binutils-2.17.tar.gz.
4. Once you have the two packages, change directories to your root QNX632 directory. For example, on a Windows host, the default is typically C:\QNX632, however your install may differ. For Linux and Neutrino hosts, the default root QNX directories are usually /opt/qnx632 and /usr/qnx632, respectively.
5. Uncompress the GCC 4.2 and Binutils 2.17 packages into this directory. If you are on a system that has write permissions to $QNX_HOST and $QNX_TARGET, switch to superuser/administrator access before uncompressing.

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## After You Install[#](#)

After the packages are uncompressed, you will be able to use the GCC 4.2 compiler by invoking the qcc driver and specifying the 4.2.1 version. For example: qcc -V4.2.1,gcc_ntoshle helloworld.c. GCC 4.2.1 will also be listed as an available compiler within the IDE.

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# Licensing[#](#)

This is experimental code being provided for evaluation purposes only, and is under the terms of a valid QNX Momentics development tool license agreement.