About This Manual

This manual describes the MIPS R10000 RISC microprocessor (also referred to as the *processor* in this book).

Glossary

Certain specialized terms used in this book are defined in the *Glossary* at the end of this manual.

Stylistic Conventions

A brief note on some of the stylistic conventions used in this book: bits, fields, and registers of interest from a software perspective are italicized (such as the *BE* bit in the *Config* register).

Signal names of more importance from a hardware point of view are rendered in bold (such as Reset *). The asterisk appended to the signal name (as in Reset*) indicates the signal is low-active.

A range of bits uses a colon as a separator; for instance, (15:0) represents the 16-bit range that runs from bit 0, inclusive, through bit 15. In some places an ellipsis (15...0) or partial ellipsis (15..0) may used in place of a colon for visibility.

Unfamiliar terms presented for the first time are printed in bold letters , and are followed as closely as possible by a definition or description.

Getting MIPS Documents On-Line

The information in this manual, and other MIPS-related product information, is also available over the Word Wide Web at:

http://www .mips.com/

Requests can also be e-mailed to webmaster@mti.sgi.com .

MIPS documents are also available for retrieval on-line, through the file transport protocol (FTP). To retrieve them, follow the steps below. The text you are to type is shown in **`Courier Bold`** font; the computer's responses are in shown in `Courier Regular` font.

1. First, place yourself in the directory on your system within which you want to store the retrieved files. Do this by typing:

   `cd <directory_you_want_file_to_be_in>`

2. Access the MIPS document server, sgigate , through FTP by typing:

   ftp sgigate.sgi.com

3. The server tells you when you are connected for FTP by responding:

   ```
   Connected to sgigate.sgi.com.
   ```

4. Next (after some announcements) the server asks you to log in by requesting a name and then a password.

   ```
   Name (sgigate.sgi.com:<login_name>):
   ```

5. Login by typing anonymous for your name and your electronic mail address for your password.

   ```
   Name (sgigate.sgi.com:<login_name>): anonymous
   331 Guest login ok, type your name as password.
   Password: your_email_address
   ```

6. The system indicates you have logged in by supplying an FTP prompt:

   ```
   ftp>
   ```

7. Go to the pub/doc directory by typing:

   ```
   ftp> cd pub/doc
   ```

8. You can take a look at the contents of the doc directory by listing them:

   ```
   ftp> ls
   ```

9. You will find several subdirectories, such as R4200, R8000, and R10000. When you find the subdirectory you want, cd into that subdirectory and retrieve the file you want by typing:

   get <filename>

10. This copies the file from sgigate back to your system.
11. When you have retrieved all the files you want, exit from ftp by typing quit :

    ```
    ftp> quit
    ```

12. If the file was encoded for transmission, you must decode it, after retrieval, by typing:

    uudecode <filename>

13. If the file was compressed for transmission, you must uncompress it, after retrieval, by typing:

    uncompress <filename>

14. If you tarred the file, type:

    tar xvof <filename>