## Example Program for the Embecosm Proxy RSP Server

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## **Chapter 1**

# **Example Program for the Embecosm Proxy GDB RSP Server**

#### 1.1 About

This is a simple program which can be compiled with the OpenRISC 1000 toolchain to create a binary image compatible with the Proxy RSP Server configuration file "or1k.cfg".

#### 1.2 Installation

This directory is not intended to be installed directly. If the OpenRISC 1000 toolchain is stalled, the binary can be rebuilt using the Makefile. However unless the toolchain matches exactly that used when creating the example, the result may not be compatible with or1k.cfg. For this reason, the binary image (file hello) is also distributed.

The Makefile may need editing to change the name and/or location of the OpenRISC 1000 compiler and linker tools.

The Makefile target "doc" can be used to rebuild this Doxygen documentation. It requires doxygen (see <a href="http://www.doxygen.org/">http://www.doxygen.org/</a>) to be installed. PDF output also requires TeX (see <a href="http://www.tug.org/">http://www.tug.org/</a>) to be installed.

### 1.3 Copying

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# **Chapter 2**

# **File Index**

## 2.1 File List

Here is a list of all files with brief descriptions:

hello.c	
mainpage	7
utils.c	
utils.h	O

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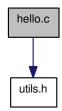
# **Chapter 3**

# **File Documentation**

### 3.1 hello.c File Reference

#include "utils.h"

Include dependency graph for hello.c:



#### **Functions**

- void level2 ()
- void level1 ()
- main ()

#### 3.1.1 Function Documentation

#### **3.1.1.1** void level1 ()



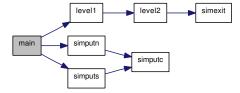
File Documentation

#### **3.1.1.2 void level2** ()

Here is the call graph for this function:



#### **3.1.1.3** main ()



## 3.2 mainpage File Reference

### 3.2.1 Detailed Description

File Documentation

#### 3.3 utils.c File Reference

#### **Defines**

- #define NOP\_NOP 0x0000
- #define NOP\_EXIT 0x0001
- #define NOP\_REPORT 0x0002
- #define NOP\_PRINTF 0x0003
- #define NOP\_PUTC 0x0004
- #define NOP\_CNT\_RESET 0x0005

#### **Functions**

- void simexit (int rc)
- void simputc (int c)
- void simputh (unsigned long int i)
- void simputn (unsigned long int i)
- void simputs (char \*str)

#### 3.3.1 Define Documentation

- 3.3.1.1 #define NOP\_CNT\_RESET 0x0005
- 3.3.1.2 #define NOP\_EXIT 0x0001
- 3.3.1.3 #define NOP\_NOP 0x0000
- 3.3.1.4 #define NOP\_PRINTF 0x0003
- 3.3.1.5 #define NOP\_PUTC 0x0004
- ${\bf 3.3.1.6} \quad \text{\#define NOP\_REPORT 0x00002}$

#### 3.3.2 Function Documentation

**3.3.2.1 void simexit (int** *rc***)** 

Exit the simulator!!

#### **Parameters:**

rc Return code (not used)

#### 3.3.2.2 void simpute (int c)

Print a character!!

#### **Parameters:**

c Character to print

3.3 utils.c File Reference

#### 3.3.2.3 void simputh (unsigned long int i)

Print a hex number!!

#### **Parameters:**

i Number to print

Here is the call graph for this function:



#### 3.3.2.4 void simputn (unsigned long int i)

Print a decimal number!!

#### **Parameters:**

i Number to print

Here is the call graph for this function:



#### 3.3.2.5 void simputs (char \* str)

Print a string!!

#### **Parameters:**

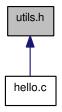
str String to print



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### 3.4 utils.h File Reference

This graph shows which files directly or indirectly include this file:



#### **Functions**

- void simexit (int rc)
- void simputc (int c)
- void simputh (int i)
- void simputs (char \*str)

#### 3.4.1 Function Documentation

#### **3.4.1.1 void simexit (int** *rc***)**

Exit the simulator!!

#### **Parameters:**

rc Return code (not used)

#### 3.4.1.2 void simpute (int c)

Print a character!!

#### **Parameters:**

c Character to print

#### 3.4.1.3 void simputh (int i)

#### 3.4.1.4 void simputs (char \* str)

Print a string!!

#### **Parameters:**

str String to print



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