3

Development Environment Status

This chapter will describe the current status of release version 3.2.0 of the RTEMS Development Environment.

3.1 RTEMS Executive Status

Release 3.2.0 of the RTEMS Executive contains the following managers:

- *Task*
- *Initialization*
- *Clock*
- *Timer*
- *Interrupt*
- *Fatal Error*
- *Message*
- *Semaphore*
- *User Extensions*
- *Event*
- *Signal*
- *Region*
- *Partition*
- *Dual Ported Memory*
- *I/O*
- *Multiprocessing*
- *Rate Monotonic*

This release of the **C** implementation supports the following processors and target boards:

- *Motorola M68k family*
  - DY-4 DMV152, SVME153
  - Motorola IDP
  - Motorola MVME135, MVME136
  - Motorola MVME162
  - "no_bsp" example BSP
- *Intel i386 family*
  - Force CPU386
- *Intel i960 family*
  - Cyclone CVME960, CVME961
- *Hewlett Packard PA-RISC family*
  - Processor Simulator
- *UNIX*
  - Hewlett Packard HPUX (PA-RISC)
  - Sun Solaris 2.x (SPARC)

This release of the **Ada** implementation supports the following processors and target boards:

- *Motorola M68k family*
  - Motorola MVME135, MVME136

Support for the Cygnus NEWLIB Standard C Library is provided with this release which may be used on any of the **RTEMS** supported targets. The BSPs only provide support for console I/O only using this library. Support for the reentrancy capabilities of newlib is provided in the **RTEMS** distribution.

Currently, online manual pages for RTEMS utilities are not available.

3.2 Development Environment Status

This section details the versions of the tools used to develop and maintain **RTEMS** 3.2.0:

- *Host Tools*

- gcc 2.6.3
- binutils 2.5.2 (if needed on host)
- zip 1.2.4
- m4 1.4
- make 3.72.1
- cpio 2.3

- *Motorola MC68020*
  - binutils 2.5.2
  - gcc 2.6.3
  - newlib beta plus **RTEMS** support
- *Intel i386*
  - binutils 2.5.2
  - gcc 2.6.3
  - newlib beta plus **RTEMS** support
- *Intel i960CA*
  - Intel GNU/960 Release 2.4
  - gcc 2.6.3
  - newlib beta plus **RTEMS** support
- *Modules*
  - Modules 2.0
  - Tcl 6.5

3.3 Known Problems

Problems which are known to exist at the time of release are described in the following sections. These are provided as warnings to the user and where possible, workarounds are provided until the problem is corrected.

3.3.1 Executive Problems

There appears to be a critical section problem in the file c/src/exec/rtems/watchdog.c.

3.3.2 Development Environment Problems

- *The Ada board support packages, device drivers, and support libraries are not currently organized like their C counterparts.*

3.4 RTEMS Problem Reporting

A problem report is provided at the end of this document and may be copied by the RTEMS user. Please fill out the form completely to assure a speedy response to the problem. In filling out the problem report the following instructions apply:

Customer Name and Address:	The full name and mailing address of the customer or company where correspondence from RTEMS support personnel may be shipped.
Contact Name:	The name of the person with whom RTEMS support personnel will correspond with concerning the reported problem.
Telephone Voice/FAX:	The telephone numbers which will enable RTEMS support personnel to reach the designated contact name.
Product/Version:	The RTEMS product (C, Ada) and the version that is currently in use.
Target Processor/System:	The processor and board type that is the target.
Host Computer System:	The manufacturer and model number of the system on which RTEMS has been installed.
Host Operating System/Version:	The operating system and version under which RTEMS has been installed.
Report Type:	Check the most appropriate description of the reported problem.
Customer Impact:	Check the most appropriate description of the severity of the reported problem.

Detailed Description:	A written description of the problem including the area of the RTEMS development environment where the problem is located and its behavior. Please feel free to provide source code listings, makefiles, possible solutions, and any other information describing the problem. This additional information may be submitted in hard-copy form, QIC-150 or 8 mm cartridge tape, e-mail, or anonymous ftp.

All correspondence concerning problems with any aspect of RTEMS should be addressed as follows (magnetic tapes should be marked: DO NOT X-RAY):

RTEMS
ATTN:AMSMI-RD-GC-S
U.S. Army Missile Command
Redstone Arsenal, AL 35898-5254
Voice: (205) 842-6906
FAX: (205) 842-6917
EMAIL: rtems@redstone.army.mil