# 4

# Default Fatal Error Processing

## 4.1 Introduction

Upon detection of a fatal error by either the application or **RTEMS** the fatal error manager is invoked. The fatal error manager will invoke a user-supplied fatal error handler. If no user-supplied handler is configured, the **RTEMS** provided default fatal error handler is invoked. If the user-supplied fatal error handler returns to the executive the default fatal error handler is then invoked. This chapter describes the precise operations of the default fatal error handler.

## 4.2 Default Fatal Error Handler Operations

The default fatal error handler which is invoked by the **fatal_error_occurred** directive when there is no user handler configured or the user handler returns control to **RTEMS**. The default fatal error handler disables processor interrupts (i.e. sets the I bit in the PSW register to 0), places the error code in **r1**, and executes a **break** instruction to simulate a halt processor instruction.