Table of Contents

1 Introduction 1

2 Directory Structure 3

2.1 Suites 4
2.1.1 C Suites 5
2.1.1.1 Executive Source Directory 6
2.1.1.2 Support Library Source Directory 7
2.1.1.3 Test Suite Source Directory 8
2.1.2 Ada Suites 10
2.1.2.1 Executive Source Directory 11
2.1.2.2 Support Library Source Directory 12
2.1.2.3 Test Suite Source Directory 13
2.2 Makefiles and Target Directories 14

3 Compilation and GNU Make Stanzas 15

3.1 Making a Component 16
3.2 Optional Manager Support 17

4 Sample Applications 19

4.1 Introduction 19
4.2 Hello World 19
4.3 Clock Tick 20
4.4 Base Single Processor Application 21
4.5 Base Multiple Processor Application 22
4.6 Constructor/Destructor C++ Application 22
4.7 Paranoia Floating Point Application 23

5 RTEMS Specific Utilities 25

5.1 C Language Specific Utilities 27
5.1.1 packhex - Compress Hexadecimal File 28
5.1.2 unhex - Convert Hexadecimal File into Binary Equivalent 29
5.1.3 size_rtems - Report RTEMS Size Information 30
5.2 Ada Language Specific Utilities 32

5.2.1 scope - Start Tartan AdaScope 33
5.2.2 packhex - Compress Hexadecimal File 35
5.2.3 size_rtems - Report RTEMS Size Information 36