ISO/IEC 23360-5:2006-12 (E)

Linux Standard Base (LSB) core specification 3.1 - Part 5: Specification for PPC32 architecture

Contents

Page

I Introductory Elements 0

1 Scope 1
1.1 General 1
1.2 Module Specific Scope 1

2 References 2
2.1 Normative References 2
2.2 Informative References/Bibliography 4

3 Requirements 6
3.1 Relevant Libraries 6
3.2 LSB Implementation Conformance 6
3.3 LSB Application Conformance 7

4 Definitions 9

5 Terminology 10

6 Documentation Conventions 12

II Executable And Linking Format (ELF) 13

7 Introduction 14

8 Low Level System Information 15
8.1 Machine Interface 15
8.2 Function Calling Sequence 16
8.3 Operating System Interface 16
8.4 Process Initialization 17
8.5 Coding Examples 19
8.6 C Stack Frame 20
8.7 Debug Information 20

9 Object Format 21
9.1 Introduction 21
9.2 ELF Header 21
9.3 Sections 21
9.4 Symbol Table 23
9.5 Relocation 23

10 Program Loading and Dynamic Linking 24
10.1 Introduction 24
10.2 Program Header 24
10.3 Program Loading 24
10.4 Dynamic Linking 24

III Base Libraries 26

11 Libraries 27
11.1 Program Interpreter/Dynamic Linker 27

11.2 Interfaces for libc ... 27
11.3 Data Definitions for libc ... 41
11.4 Interfaces for libm ... 54
11.5 Data Definitions for libm ... 58
11.6 Interfaces for libpthread ... 59
11.7 Data Definitions for libpthread ... 61
11.8 Interfaces for libgcc_s ... 62
11.9 Data Definitions for libgcc_s ... 63
11.10 Interface Definitions for libgcc_s ... 64
11.11 Interfaces for libdl ... 69
11.12 Data Definitions for libdl ... 70
11.13 Interfaces for libcrypt ... 70

Foreword ... vii

Introduction ... viii

IV Utility Libraries ... 71

12 Libraries ... 72
12.1 Interfaces for libz ... 72
12.2 Data Definitions for libz ... 72
12.3 Interfaces for libncurses ... 72
12.4 Data Definitions for libncurses ... 73
12.5 Interfaces for libutil ... 73

V Package Format and Installation ... 75

13 Software Installation ... 76
13.1 Package Dependencies ... 76
13.2 Package Architecture Considerations ... 76

A Alphabetical Listing of Interfaces ... 77
A.1 libgcc_s ... 77

List of Figures 8-1 Initial Process Stack ... 18