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Information technology — Programming languages, their environments and system software interfaces — Extensions to the C++ Library to support mathematical special functions

Technologies de l'information — Langages de programmation, leur environnement et interfaces des logiciels de systèmes — Extensions à la bibliothèque C++ pour supporter les fonctions mathématiques spéciales

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Contents

Contents	iii
List of Tables	v
Foreword	vi
Introduction	vii
1 Scope	1
1.1 Purpose and intent	1
1.2 Relation to C++ Standard Library Introduction	1
1.3 Categories of extensions	1
2 Normative references	2
3 Terms, definitions, and symbols	3
4 Conformance	4
5 Headers	5
6 Namespaces	6
7 Macro names	7
7.1 Predefined macro name	7
7.2 User-defined macro name	7
8 Mathematical special functions	8
8.1 Additions to header <cmath>	8
8.1.1 associated Laguerre polynomials	11
8.1.2 associated Legendre polynomials	11
8.1.3 beta function	12
8.1.4 (complete) elliptic integral of the first kind	12
8.1.5 (complete) elliptic integral of the second kind	12
8.1.6 (complete) elliptic integral of the third kind	12

CONTENTS

CONTENTS iv

8.1.7	regular modified cylindrical Bessel functions	13
8.1.8	cylindrical Bessel functions (of the first kind)	13
8.1.9	irregular modified cylindrical Bessel functions	13
8.1.10	cylindrical Neumann functions	14
8.1.11	(incomplete) elliptic integral of the first kind	14
8.1.12	(incomplete) elliptic integral of the second kind	15
8.1.13	(incomplete) elliptic integral of the third kind	15
8.1.14	exponential integral	15
8.1.15	Hermite polynomials	15
8.1.16	Laguerre polynomials	16
8.1.17	Legendre polynomials	16
8.1.18	Riemann zeta function	16
8.1.19	spherical Bessel functions (of the first kind)	17
8.1.20	spherical associated Legendre functions	17
8.1.21	spherical Neumann functions	18
8.2	Additions to header <math.h>	18
8.3	The header <ctgmath>	18
8.4	The header <tgmth.h>	18
Bibliography		19
Index		20

List of Tables

1	Summary of affected headers	5
2	Additions to header <code><cmath></code> synopsis	8

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a Joint Technical Committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the Joint Technical Committee is to prepare International Standards. Draft International Standards adopted by the Joint Technical Committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75% of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 29124 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 22, *Programming languages, their environments and system software interfaces*.

Introduction

This International Standard is divided into three major subdivisions:

- preliminary elements (Clauses 1–3),
- indicating conformance (Clause 4), and
- the library facilities (Clauses 5–6).

Footnotes are provided to emphasize consequences of the rules described in that subclause or elsewhere in this International Standard. References are used to refer to other related documents and subclauses. A bibliography lists documents that are non-normatively cited in this International Standard, or that were referred to during its preparation.

The provisions of this International Standard are based on 5.2 (“Mathematical special functions”) of ISO/IEC TR 19768:2007 [2]. That subclause also served as a basis for a similar International Standard [3]. Because of their common origin, it is intended that both these International Standards specify substantially identical syntax and semantics to the extent permitted by each Standard’s programming language.