INTERNATIONAL STANDARD

ISO/IEC 14165-331

First edition
2007-07

Information technology –
Fibre channel –

Part 331: Virtual interface (FC-VI)

PRICE CODE X

For price, see current catalogue

CONTENTS

INFORMATION TECHNOLOGY – FIBRE CHANNEL –

Part 331: Virtual interface (FC-VI)

FOREWORD

1) ISO (International Organization for Standardization) and IEC (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. Their preparation is entrusted to technical committees; any ISO and IEC member body interested in the subject dealt with may participate in this preparatory work. International governmental and non-governmental organizations liaising with ISO and IEC also participate in this preparation.

2) In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. 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.

3) The formal decisions or agreements of IEC and ISO on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC and ISO member bodies.

4) IEC, ISO and ISO/IEC publications have the form of recommendations for international use and are accepted by IEC and ISO member bodies in that sense. While all reasonable efforts are made to ensure that the technical content of IEC, ISO and ISO/IEC publications is accurate, IEC or ISO cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.

5) In order to promote international uniformity, IEC and ISO member bodies undertake to apply IEC, ISO and ISO/IEC publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any ISO/IEC publication and the corresponding national or regional publication should be clearly indicated in the latter.

6) ISO and IEC provide no marking procedure to indicate their approval and cannot be rendered responsible for any equipment declared to be in conformity with an ISO/IEC publication.

7) All users should ensure that they have the latest edition of this publication.

8) No liability shall attach to IEC or ISO or its directors, employees, servants or agents including individual experts and members of their technical committees and IEC or ISO member bodies for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication of, use of, or reliance upon, this ISO/IEC publication or any other IEC, ISO or ISO/IEC publications.

9) Attention is drawn to the normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.

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

International Standard ISO/IEC 14165-331 was prepared by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology.

The list of all currently available parts of ISO/IEC 14165 series, under the general title *Information technology – Fibre channel,* can be found on the IEC web site.

This International Standard has been approved by vote of the member bodies, and the voting results may be obtained from the address given on the second title page.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

INTRODUCTION

This International Standard defines an upper-layer protocol within the domain of Fibre Channel, that is designed to permit efficient peer-to-peer or client-server messaging between nodes, and to comply with the Virtual Interface (VI) Architecture. Vendors that wish to implement devices that connect to FC-VI may follow the requirements of this and other normatively referenced standards to manufacture an FC-VI compliant device.

INFORMATION TECHNOLOGY – FIBRE CHANNEL –

Part 331: Virtual interface (FC-VI)

1 Scope

This part of ISO/IEC 14165 defines the Fibre Channel mapping protocol for the Virtual Interface (VI) Architecture (FC-VI). FC-VI defines the Fibre Channel Information Units in accordance with the VI Architecture model. FC-VI additionally defines how Fibre Channel services are used to perform the services required by the VI Architecture model of its network transport.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced documents (including any amendments) applies.

ISO/IEC 14165-122, *Information technology – Fibre channel – Arbitrated Loop-2 (FC-AL-2)*

ISO/IEC 14165-251, *Information technology – Fibre channel – Framing and Signalling Interface (FC-FS)* (To be published)

ISO/IEC 14165-414, *Information technology – Fibre channel – Generic services-4 (FC-GS-4)*

The following references for VI Architecture are the product of Intel, Microsoft and Compaq. The VI Architecture 1.0 specification is completely defined in these three documents. For the convenience of the reader they are added as supplementary documents.

Virtual Interface Architecture Specification, V1.0 (VI-ARCH)

Virtual Interface (VI) Architecture Developer's Guide, V1.0 (VI-DG)

Virtual Interface (VI) Architecture Developer's Guide Error Table Supplement, V1.0

IP Version 6 Addressing Architecture, RFC 2373, July 1998 (RFC2373)
(can be downloaded from the Internet)