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FOREWORD

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International Standard ISO/IEC 14165-151 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 the 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.

IMPORTANT - The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

This part of ISO/IEC 14165 describes extensions to the Fibre Channel signaling and physical layer requirements defined in ANSI INCITS 404-2005, Fibre Channel - Physical Interfaces 2, to transport Fibre Channel over the commonly available 4-pair balanced copper cablings specified in ISO/IEC 11801:2002 and TIA/EIA-568-B.2-2001. This document is one of the Fibre Channel family of standards.

INFORMATION TECHNOLOGY — FIBRE CHANNEL —

Part 151: Fibre Channel BaseT (FC-BaseT)

1 Scope

This part of ISO/IEC 14165 describes extensions to the Fibre Channel signaling and physical layer requirements defined in ISO/IEC 14165-142, Fibre Channel - Physical Interfaces 2, to transport Fibre Channel over the commonly available 4-pair balanced copper cablings specified in ISO/IEC 11801:2002 and TIA/EIA-568-B.2-2001. This standard is one of the Fibre Channel family of standards.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60603-7-2, *Connectors for electronic equipment – Part 7-2: Detail specification for 8-way, unshielded, free and fixed connectors, for data transmissions with frequencies up to 100 MHz*

IEC 60603-7-3, *Connectors for electronic equipment – Part 7-3: Detail specification for 8-way, shielded, free and fixed connectors, for data transmission with frequencies up to 100 MHz*

IEC 60603-7-4, *Connectors for electronic equipment – Part 7-4: Detail specification for 8-way, unshielded, free and fixed connectors, for data transmissions with frequencies up to 250 MHz*

IEC 60603-7-5, *Connectors for electronic equipment – Part 7-5: Detail specification for 8-way, shielded, free and fixed connectors, for data transmissions with frequencies up to 250 MHz*

ISO/IEC 14165-122, *Information technology - Fibre Channel - Part 122: Arbitrated Loop - 2 (FC-AL-2)* [ANSI INCITS 332-1999 including ANSI INCITS 332-1999/AM1-2003 and ANSI INCITS 332-1999/AM2-2006]

ISO/IEC 11801:2002, *Information technology - Generic cabling for customer premises*

ISO/IEC 11801:2002/AMD1:2008

ISO/IEC 11801:2002/AMD2:2010

ISO/IEC TR 24750, *Information technology - Assessment and mitigation of installed balanced cabling channels in order to support 10GBASE-T*

ANSI INCITS 404-2006, *Information technology - Fibre Channel - Part 142: Physical Interfaces - 2 (FC-PI-2)*

ANSI INCITS 424-2007, *Information technology - Fibre Channel - Framing and Signaling - 2 (FC-FS-2)*

IEEE Std 802.3-2005, *Standard for information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 3: Carrier sense multiple access with collision detection (CSMA/CD) access method and physical layer specifications*

IEEE Std 802.3an-2006, *Physical Layer and Management Parameters for 10 Gb/s Operation, Type 10GBASE-T*