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INCITS 512-2015 (R2020)

American National Standard

for Information Technology –
Fibre Channel –
Physical Interface-6 (FC-PI-6)

INCITS 512-2015

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American National Standard
for Information Technology –

Fibre Channel – Physical Interface-6 (FC-PI-6)

Secretariat

Information Technology Industry Council

Approved January 28, 2015

American National Standards Institute, Inc.

Abstract

This standard describes the point-to-point physical interface portions of Fibre Channel serial electrical and optical link variants that support the higher level Fibre Channel protocols. This standard is recommended for new implementations but does not obsolete existing Fibre Channel standards.

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Foreword (This foreword is not part of American National Standard INCITS 512-2015.)

This standard was developed by Task Group T11.2 of Accredited Standards Committee INCITS during 2011, 2012, and 2013. The standards approval process was started in 2013. This document includes three annexes that are informative and are not considered part of the standard.

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Bill Ham
Schelto Van Doorn

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Brian Misek for copper link budget studies

Dean Wallace for leadership

In Memoriam

Brian Misek

The FC-PI-6 document is dedicated to the memory of Brian Misek. Brian made significant technical contributions to the FC-PI-6 document. Brian's technical contributions and humor will be missed.

American National Standard
for Information Technology–

Fibre Channel –
Physical Interface-6 (FC-PI-6)

1 Scope

This international standard describes the physical interface portions of high performance electrical and optical link variants that support the higher level Fibre Channel protocols including FC-FS-4 (reference [18]).

FC-PI-6 includes 32GFC. 16GFC, 8GFC and 4GFC are described in FC-PI-5 (reference [1]). Older technologies of 2GFC and 1GFC are listed in FC-PI-2 (reference [3]).

2 Normative references

2.1 General

The following standards contain provisions that, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. Standards are subject to revision, and parties to agreements based on this Standard are encouraged to investigate the possibility of applying the most recent editions of the following list of standards. Members of IEC and ISO maintain registers of currently valid International Standards.

Copies of the following documents can be obtained from ANSI: Approved ANSI standards, approved and draft international and regional standards (ISO, IEC), and other approved standards (including JIS and DIN).

2.2 Normative references

2.2.1 Approved references

[1] **INCITS 479-2011, FC-PI-5,** *Fibre Channel - Physical Interfaces - 5*

[2] **INCITS 460-2011, FC-PI-3,** *Fibre Channel - Physical Interfaces - 3*

[3] **INCITS 404-2006, FC-PI-2,** *Fibre Channel - Physical Interfaces - 2*

[4] **INCITS TR-35-2006, FC-MJSQ,** *Fibre Channel - Methodologies for Jitter and Signal Quality specification*

[5] **INCITS TR-46-2011, FC-MSQS,** *Fibre Channel - Methodologies for Signal Quality specification*

[6] **IEC 60793-1-43,** *Optical fibers - Part 1-43: Measurement methods and test procedures - Numerical aperture*

[7] **IEC 60793-2-10,** *Optical fibers - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibers*