

INTERNATIONAL STANDARD

ISO/IEC 14165-211

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Information technology – Fibre Channel –

Part 211: Mapping to HIPPI-FP (FC-FP)

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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. 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.

International Standard ISO/IEC 14165-211 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information Technology*, Subcommittee SC 25, *Interconnection of Information Technology Equipment*.

This part of ISO/IEC 14165 defines the frame format and protocol definitions required to transfer information for upper-layer protocols that use the High-Performance Parallel Interface – Framing Protocol (HIPPI-FP) when using a lower-layer serial link interface operating according to the Fibre Channel – Physical and Signaling Interface (FC-PH) and Fibre Channel – Enhanced Physical (FC-EP) requirements. For example, the HIPPI upper-layer protocols would use FC-FP when the underlying physical layer is Fibre Channel, and would use HIPPI-FP when the underlying physical layer is HIPPI.

In this document the term Fibre Channel refers to the FC-PH and FC-EP entities only. In relation to the Fibre Channel structures defined in FC-PH, this document, FC-FP, represents an FC-4.

Characteristics of FC-FP include:

- Encapsulation of HIPPI-FP packets, including the HIPPI-FP header, in Fibre Channel Information Units and Exchanges;
- Separation of the HIPPI-FP D1_Data_Set and D2_Data_Set.

ISO/IEC 14165 will consist of the following parts, under the general title *Information technology – Fibre Channel*:

- Part 111: *Physical and Signaling Interface (FC-PH)*
- Part 112: *2nd Generation Physical Interface (FC-PH-2)*
- Part 113: *3rd Generation Physical Interface (FC-PH-3)*
- Part 121: *Arbitrated Loop (FC-AL)*
- Part 131: *Switched Fabric and Switch Control Requirements (FC-SW)*
- Part 141: *Fabric Generic Requirements (FC-FG)*
- Part 211: *Mapping to HIPPI-FP (FC-FP)*
- Part 221: *Single-Byte Command Code Sets (FC-SB)*
- Part 231: *Link Encapsulation (FC-LE)*
- Part 411: *Generic Services (FC-GS)*

Annex A is not an integral part of this standard, but is included for information only.

Information technology – Fibre Channel –

Part 211: Mapping to HIPPI-FP (FC-FP)

1 Scope

This part of ISO/IEC 14165 provides a mapping for upper-layer protocols that use the High-Performance Parallel Interface – Framing Protocol (HIPPI-FP), to use the Fibre Channel – Physical and Signaling Interface (FC-PH) as the lower-layer transfer mechanism.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 14165. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO/IEC 14165 are encouraged to investigate the possibility of applying the most recent editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO/IEC 11518-2:1996 – *Information technology – High-Performance Parallel Interface – Part 2: framing protocol (HIPPI-FP)*.

ISO/IEC 14165-111 – *Information technology – Fibre Channel – Part 111: Physical and Signalling Interface (FC-PH)*.

ISO/IEC 14165-112 – *Information technology – Fibre Channel – Part 112: 2nd Generation Physical Interface (FC-PH-2)*.

ISO/IEC 14165-113 – *Information technology – Fibre Channel – Part 113: 3rd Generation Physical Interface (FC-PH-3)*.