INTERNATIONAL STANDARD

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Information technology — High-Performance Parallel Interface —

Part 2: Framing Protocol (HIPPI-FP)

Technologies de l'information — Interface parallèle à haute performance —

Partie 2: Protocole de trame (HIPPI-FP)

Reference number
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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 11518-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology,* Subcommittee SC 25, *Interconnection of information technology equipment.*

ISO/IEC 11518 consists of the following parts, under the general title *Information technology – High-Performance Parallel Interface:*

- *Part 1: Mechanical, electrical, and signalling protocol specification (HIPPI-PH)*
- *Part 2: Framing Protocol (HIPPI-FP)*
- *Part 3: Encapsulation of ISO/IEC 8802-2 (IEEE Std 802.2) Logical Link Control Protocol Data Units (HIPPI-LE)*
- *Part 4: Mapping of HIPPI to IPI device generic command sets (HIPPI-IPI)*
- *Part 5: Memory Interface (HIPPI-MI)*
- *Part 6: Physical Switch Control (HIPPI-SC)*

Annexes A and B of this part of ISO/IEC 11518 are for information only.

Introduction

This part of ISO/IEC 11518 defines the data framing for an efficient simplex high-performance point-to-point interface.

Characteristics of HIPPI-FP include

- Large block data transfers with framing to split the data into smaller bursts.
- Separation of user control and data information, and early delivery of the control information.
- Identifiers for multiple upper-layer protocols (ULPs).
- Support for simplex topology.
- Support for ULP non-word-aligned and an arbitrary number of byte transfers.
- Error notifications, from the underlying physical layer, e.g., HIPPI-PH, are passed through this framing protocol to notify the upper layers of damaged data.
- Provides a connection-less data service.
- Best effort delivery of data, i.e., datagram.
- Connection control information, which may be used for physical layer switching, is supported.

Figure 1 shows the relationship of this part of ISO/IEC 11518 (in the solid rectangle) to the other entities shown.

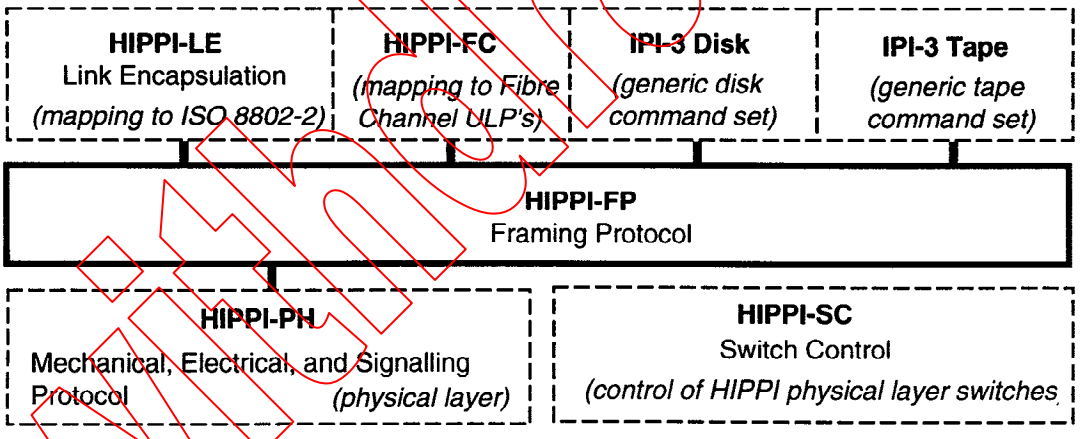

Figure 1 – HIPPI documents

Information technology – High-Performance Parallel Interface –

Part 2: Framing Protocol (HIPPI-FP)

1 Scope

This part of ISO/IEC 11518 provides the data framing for a high-performance point-to-point interface between data-processing equipment. This part of ISO/IEC 11518 does not protect against certain errors which might be introduced by intermediate devices interconnecting multiple HIPPI-PHs.

The purpose of this part of ISO/IEC 11518 is to facilitate the development and use of the HIPPI in computer systems by providing common data framing. It provides an efficient framing protocol for interconnections between computers, high-performance display systems, and high-performance, intelligent block-transfer peripherals.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 11518. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO/IEC 11518 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO/IEC 11518-1:1995 - *Information technology - High-Performance Parallel Interface - Part 1: Mechanical, electrical, and signalling protocol specification (HIPPI-PH)* .