INTERNATIONAL STANDARD

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Information technology — High-Performance Parallel Interface —

Part 3:

Encapsulation of ISO/IEC 8802-2 (IEEE Std 802.2) Logical Link Control Protocol Data Units (HIPPI-LE)

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

Partie 3: Encapsulation de l'ISO/CEI 8802-2 (IEEE Std 802.2) unités de données du protocole de contrôle de liaison logique (HIPPI-LE)



ISO/IEC 11518-3:1996(E)

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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 11518-3 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 HIPPI-LE Protocol Data Unit (PDU) format and interface for transporting ISO/IEC 8802-2 Logical Link Control PDUs over HIPPI.

Characteristics of this HIPPI-LE include

- Encapsulation of arbitrary Protocol Data Units that conform to ISO/IEC 8802-2 Logical Link Control;
- Provision for 48-bit source and destination addresses conforming to ISO/IEC 8802-1;
- Provision for eight forwarding classes to distinguish, for example, among ordinary data PDUs, PDUs for services that require bandwidth guarantees such as packet video, etc.

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

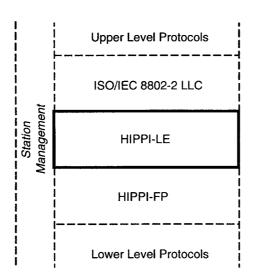


Figure 1 - Protocol hierarchy

Information technology – High-Performance Parallel Interface –

Part 3:

Encapsulation of ISO/IEC 8802-2 (IEEE Std 802.2) Logical Link Control Protocol Data Units (HIPPI-LE)

1 Scope

This part of ISO/IEC 11518 provides a common method for encapsulating ISO/IEC 8802-2 Logical Link Control Protocol Data Units (PDU) on HIPPI.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 11518. 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 11518 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO/IEC 8802-1:1994 Information technology – Telecommunications and information exchange between systems – Local and metropolitan area networks – Specific requirements – Part 1: Overview of Local Area Network Standards.

ISO/IEC 8802-2:1994 Information technology – Telecommunications and information exchange between systems – Local and metropolitan area networks – Specific requirements – Part 2: Logical link control.

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