INTERNATIONAL STANDARD

ISO/IEC 17568

First edition
2013-03-01

Information technology — Telecommunications and information exchange between systems — Close proximity electric induction wireless communications

Technologies de l'information — Téléinformatique — Communications sans fil à induction électrique de proximité rapprochée

Reference number
ISO/IEC 17568:2013(E)

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Published in Switzerland

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 17568 was prepared by Ecma International (as ECMA-398) and was adopted, under a special “fast-track procedure”, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

Introduction

Today's typical consumer uses digital files to store multimedia content such as music, photos, and videos. But these files are quickly becoming larger in number and size. A continual demand for higher quality results in larger file sizes. And proliferation of smaller, portable devices makes it easier to generate more content in less time. But the desire to store, share, and enjoy that content remains strong. And this usually requires transferring the content from one device to another. For example, storing might involve transferring the content from a video camera to an external disk drive. Sharing photos might involve transferring the contents from one mobile phone to another mobile phone. And enjoying content might involve streaming content from a video camera to a TV using a special video cable.

But with today's available technology, these activities present difficulties to the average consumer. The transfer process may take a long time due to the large file sizes. Or it may involve special cables or complex setup. Therefore, a need exists to make it faster and simpler to transfer large multimedia files. This International Standard specifies a technology that addresses this need by using close proximity electric induction to transfer large files quickly and easily.

Information technology — Telecommunications and information exchange between systems — Close proximity electric induction wireless communications

1 Scope

This International Standard specifies a connection layer (CNL) and a physical layer (PHY) for transferring data between two close proximity entities using electric induction coupling.

2 Conformance

Implementations conforming to this International Standard implement both the CNL and the PHY. All Conforming implementations support a centre frequency of 4,48 GHz and all rate settings specified in Table 2.

3 Normative references

The following referenced documents are indispensable for the application 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.

ISO/IEC 7498-1:1994*, Information technology — Open System Interconnection — Basic Reference Model: The Basic Model*

ITU-T Z.120, *Series Z: Languages and General Software Aspects for Telecommunication Systems, Formal description techniques (FDT) – Message Sequence Chart (MSC)*