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American National Standard

*Identification cards —
Integrated circuit card programming interfaces —
Part 1: Architecture*

Developed by



Where IT all begins



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Part 1: Architecture

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Partie 1: Architecture*

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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 24727-1 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and personal identification*.

ISO/IEC 24727 consists of the following parts, under the general title *Identification cards — Integrated circuit card programming interfaces*:

- *Part 1: Architecture*
- *Part 2: Generic card interface*
- *Part 3: Application interface*

API administration and testing will form the subjects of the future Parts 4 and 5, respectively.

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Introduction

ISO/IEC 24727 is a set of programming interfaces for interactions between integrated circuit cards (ICCs) and external applications to include generic services for multi-sector use. The organization and the operation of the ICC conform to ISO/IEC 7816-4.

ISO/IEC 24727 is relevant to ICC applications desiring interoperability among diverse application domains.

ISO/IEC 24727 defines interfaces such that independent implementations are interoperable.

Services may be discoverable through mechanisms detailed in ISO/IEC 24727. ISO/IEC 24727 discovery methods include provisions for a client-application to discover

- card-applications available for selection on the ICC,
- information about each card-application.

ISO/IEC 24727-1 specifies the conceptual framework. It provides essential background information for the subsequent parts. Developers using ISO/IEC 24727 are encouraged to read this introductory part of ISO/IEC 24727. The other parts provide technical details of the concepts specified in ISO/IEC 24727-1.

ISO/IEC 24727-2 details the functionality and related information structures available to the implementation of the interface defined in ISO/IEC 24727-3.

ISO/IEC 24727-3 details service access mechanisms to initiate their use by a client-application.

ISO/IEC 24727-4 will detail trust mechanisms and connectivity mechanisms between adjacent components in the communication stack.

ISO/IEC 24727-5 will detail test mechanisms.

Functionality for ISO/IEC 24727-3 usually resides outside of the ICC. Functionality for ISO/IEC 24727-2 may reside inside the ICC.