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Identification cards — Integrated circuit card programming interfaces —

Part 3: Application interface

*Cartes d'identification — Interfaces programmables de cartes à puce —
Partie 3: Interface d'application*

Reference number
ISO/IEC 24727-3:2008(E)



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Contents

Page

Foreword	v
Introduction.....	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Abbreviated terms	3
5 Organization for interoperability.....	4
5.1 General	4
5.2 Computation model.....	4
5.3 Entity relationships on the application interface	5
5.4 Security model.....	13
6 Card-application-service access	16
6.1 General	16
6.2 Initialize	16
6.3 Terminate	17
6.4 CardApplicationPath	18
7 Connection service	19
7.1 General	19
7.2 CardApplicationConnect	20
7.3 CardApplicationDisconnect	21
7.4 CardApplicationStartSession.....	22
7.5 CardApplicationEndSession	23
8 Card-application service.....	24
8.1 General	24
8.2 CardApplicationList	25
8.3 CardApplicationCreate.....	26
8.4 CardApplicationDelete	27
8.5 CardApplicationServiceList	28
8.6 CardApplicationServiceCreate.....	29
8.7 CardApplicationServiceLoad	30
8.8 CardApplicationServiceDelete	31
8.9 CardApplicationServiceDescribe.....	32
8.10 ExecuteAction.....	33
9 Named data service.....	34
9.1 General	34
9.2 DataSetList.....	35
9.3 DataSetCreate	36
9.4 DataSetSelect.....	37
9.5 DataSetDelete	38
9.6 DSIList	39
9.7 DSICreate	40
9.8 DSIDelete.....	41
9.9 DSIWrite.....	42
9.10 DSIRead.....	43
10 Cryptographic service.....	44
10.1 General	44
10.2 Encipher	45

This is a preview of "ISO/IEC 24727-3:2008". [Click here to purchase the full version from the ANSI store.](#)

10.3	Decipher.....	46
10.4	GetRandom.....	47
10.5	Hash	48
10.6	Sign	49
10.7	VerifySignature	50
10.8	VerifyCertificate	51
11	Differential-identity service.....	52
11.1	General.....	52
11.2	DIDList	53
11.3	DIDCreate.....	54
11.4	DIDGet.....	55
11.5	DIDUpdate.....	56
11.6	DIDDelete	57
11.7	DIDAuthenticate	58
12	Authorization service	59
12.1	General.....	59
12.2	ACLList	60
12.3	ACLModify	61
Annex A	(normative) Authentication protocols	62
A.1	General.....	62
A.2	Common Definitions.....	63
A.3	Simple Assertion.....	64
A.4	Asymmetric Internal Authenticate	66
A.5	Asymmetric External Authenticate	69
A.6	Symmetric Internal Authenticate.....	72
A.7	Symmetric External Authenticate	75
A.8	Compare	78
A.9	PIN Compare	81
A.10	Biometric Compare.....	84
A.11	Mutual Authentication with Key Establishment	87
A.12	Client-Application Mutual Authentication with Key Establishment	90
A.13	Client-Application Asymmetric External Authenticate	93
A.14	Modular Extended Access Control Protocol (M-EAC)	96
A.15	Key Transport with mutual authentication based on RSA	100
A.16	Age Attainment	104
A.17	Asymmetric Session Key Establishment	107
A.18	Secure PIN Compare	114
A.19	EC Key Agreement with Card-Application Authentication.....	118
A.20	EC Key Agreement with Mutual Authentication	122
A.21	Simple EC-DH Key Agreement	128
A.22	GP Asymmetric Authentication.....	132
A.23	GP Symmetric Authentication (Explicit Mode)	138
A.24	GP Symmetric Authentication (Implicit Mode)	142
Annex B	(normative) Cryptographic algorithms.....	145
B.1	Interoperability requirements	145
B.2	Symmetric Algorithms	146
B.3	Asymmetric Algorithms	149
B.4	Elliptic Curve Algorithms	150
B.5	Hash Functions	151
B.6	Message Authentication Codes	152
B.7	Key Establishment.....	153
Annex C	(normative) ASN.1 Representation	154
C.1	General.....	154
Bibliography	193

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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 24727-3 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*
- *Part 4: Application programming interface (API) administration*
- *Part 5: Testing*
- *Part 6: Registration authority procedures for the authentication protocols for interoperability*

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. This part of ISO/IEC 24727 specifies a language-independent and implementation-independent application level interface that allows information and transaction interchange with a card. ISO/IEC 7498-1 is used as the layered architecture of the application interface. That is, the application interface assumes that there is a protocol stack through which it will exchange information and transactions among cards using commands conveyed through the message structures defined in ISO/IEC 7816. The semantics of commands accessed by the application interface refers to application protocol data units (APDUs) as characterized in ISO/IEC 24727-2, and in the following standards:

- ISO/IEC 7816-4, *Identification cards — Integrated circuit cards — Part 4: Organization, security and commands for interchange*
- ISO/IEC 7816-8, *Identification cards — Integrated circuit cards — Part 8: Commands for security operations*
- ISO/IEC 7816-9, *Identification cards — Integrated circuit cards — Part 9: Commands for card management*

The goal of this part of ISO/IEC 24727 is to maximize the applicability and solution space of software tools that provide application interface support to card-aware applications. This effort includes supporting the evolution of card systems as the cards become more powerful, peer-level partners with existing and future applications while minimizing the impact to existing solutions conforming to this part of ISO/IEC 24727.