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**Universal serial bus interfaces for data and power –
Part 1-4: Common components – USB Type-C™ Authentication Specification**

**Interfaces de bus universel en série pour les données et l'alimentation
électrique –
Partie 1-4: Composants communs – Spécification relative à l'authentification
USB Type-C™**



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Part 1-4: Common components – USB Type-C™ Authentication Specification

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The text of this standard was prepared by the USB Implementers Forum (USB-IF). The structure and editorial rules used in this publication reflect the practice of the organization which submitted it.

This bilingual version (2019-01) corresponds to the English version, published in 2018-04.

The text of this International Standard is based on the following documents:

CDV	Report on voting
100/2981/CDV	100/3046/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

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Universal Serial Bus Type-C™ Authentication Specification

Revision 1.0 with ECN and Errata through February 2, 2017

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CONTENTS

Specification Work Group Chairs / Specification Editors	12
Specification Work Group Contributors	12
Revision History	14
1 Introduction	15
1.1 Scope	15
1.2 Overview	15
1.3 Related Documents	16
1.4 Terms and Abbreviations	18
1.5 Conventions	19
1.5.1 Precedence	19
1.5.2 Keywords	19
1.5.3 Numbering	20
1.5.4 Byte Ordering	20
2 Overview	20
2.1 Topology	20
2.2 Cryptographic Methods	21
2.2.1 Random Numbers	21
2.3 Security Overview	22
2.3.1 Periodic Re-Authentication	22
2.3.2 Secret Key Storage and Protection	22
2.3.3 Security Evaluation Criteria	22
2.4 Impact to Existing Ecosystem	22
2.4.1 Proxy Capabilities (PD traversing the Hub topology)	23
3 Authentication Architecture	23
3.1 Certificates	23
3.1.1 Format	23
3.1.2 Textual Format	23
3.1.3 Attributes and Extensions	23
3.2 Certificate Chains	25
3.2.1 Provisioning	25
3.3 Private Keys	26
4 Authentication Protocol	26
4.1 Digest Query	26
4.2 Certificate Chain Read	26
4.3 Authentication Challenge	27
4.4 Errors and Alerts	27
4.4.1 Invalid Request	27
4.4.2 Unsupported Protocol Version	27
4.4.3 Busy	27

- 4.4.4 Unspecified 27
- 5 Authentication Messages 27
 - 5.1 Header 28
 - 5.1.1 USB Type-C Authentication Protocol Version 28
 - 5.1.2 Message Type 28
 - 5.1.3 Param1 28
 - 5.1.4 Param2 28
 - 5.2 Authentication Requests 28
 - 5.2.1 GET_DIGESTS 29
 - 5.2.2 GET_CERTIFICATE 29
 - 5.2.3 CHALLENGE 30
 - 5.3 Authentication Responses 30
 - 5.3.1 DIGESTS 31
 - 5.3.2 CERTIFICATE 31
 - 5.3.3 CHALLENGE_AUTH 32
 - 5.3.4 ERROR 33
- 6 Authentication of PD Products 34
 - 6.1 Transfers less than or equal to *MaxExtendedMsgLen* 34
 - 6.2 Transfers greater than *MaxExtendedMsgLen* 35
 - 6.3 Timing Requirements for PD Security Extended Messages 38
 - 6.3.1 Authentication Initiator 38
 - 6.3.2 Authentication Responder 39
 - 6.4 Context Hash 40
- 7 Authentication of USB Products 40
 - 7.1 Descriptors 40
 - 7.1.1 Authentication Capability Descriptor 40
 - 7.2 Mapping Authentication Messages to USB 41
 - 7.2.1 Authentication IN 41
 - 7.2.2 Authentication OUT 42
 - 7.3 Authentication Protocol 42
 - 7.3.1 Digest Query 42
 - 7.3.2 Certificate Read 43
 - 7.3.3 Authentication Challenge 43
 - 7.3.4 Errors 44
 - 7.4 Timing Requirements for USB 44
 - 7.4.1 USB Host Timing Requirements 44
 - 7.4.2 USB Device Timing Requirements 45
 - 7.5 Context Hash 46
- 8 Protocol Constants 46
- A ACD 47
 - A.1 ACD Formatting 47

A.1.1.	Version TLV	47
A.1.2.	XID TLV	48
A.1.3.	Power Source Capabilities TLV	48
A.1.4.	Power Source Certifications TLV	49
A.1.5.	Cable Capabilities TLV	50
A.1.6.	Security Description TLV	50
A.1.7.	Playpen TLV	54
A.1.8.	Vendor Extension TLV	55
A.1.9.	Extension TLV	55
A.2.	ACD for a PD Product	55
A.3.	ACD for a USB Product	56
B	Cryptographic Examples	57
B.1.	Example Authentication Sequence	57
B.2.	Example Certificate Chain Topology	57
B.2.1.	Certificate Chain	57
B.2.2.	Root Certificate	62
B.2.3.	Key Pairs	63
B.3.	Example Authentication Signature Verification	64
B.3.1.	CHALLENGE Request	64
B.3.2.	CHALLENGE_AUTH Response	64
C	Potential Attack Vectors	65

TABLES

Table 1-1: Terms and Abbreviations	18
Table 2-1: Summary of Cryptographic Methods	21
Table 3-1: Certificate Chain Format	25
Table 5-1: Authentication Message Header	28
Table 5-2: USB Type-C Authentication Protocol Version	28
Table 5-3: Authentication Request Types	29
Table 5-4: GET_DIGESTS Request Header	29
Table 5-5: GET_CERTIFICATE Request Header	29
Table 5-6: GET_CERTIFICATE Request Payload	30
Table 5-7: CHALLENGE Request Header	30
Table 5-8: CHALLENGE Request Payload	30
Table 5-9: Authentication Response Types	30
Table 5-10: DIGESTS Response Header	31
Table 5-11: DIGESTS Response Payload	31
Table 5-12: CERTIFICATE Response Header	31
Table 5-13: CERTIFICATE Response Payload	32

Table 5-14: CHALLENGE_AUTH Response Header	32
Table 5-15: CHALLENGE_AUTH Response Payload	33
Table 5-16: Message Contents for ECDSA Digital Signature	33
Table 5-17: ERROR Response Header	34
Table 5-18: ERROR Codes	34
Table 6-1: Timeout Values for a PD Authentication Initiator	38
Table 6-2: Timing Requirements for PD Authentication Responder	39
Table 7-1: Authentication Capability Descriptor	40
Table 7-2: Authentication Capability Descriptor Types	41
Table 7-3: Authentication Message <i>bRequest</i> Values	41
Table 7-4: Authentication IN Control Request Fields	41
Table 7-5: Authentication Message Header Mapping	41
Table 7-6: Authentication OUT Control Request Fields	42
Table 7-7: GET_DIGESTS Authentication IN Control Request Fields	42
Table 7-8: GET_CERTIFICATE Authentication OUT Control Request Fields	43
Table 7-9: CERTIFICATE Authentication IN Control Request Fields	43
Table 7-10: CHALLENGE Authentication OUT Control Request Fields	43
Table 7-11: CHALLENGE_AUTH Authentication IN Control Request Fields	44
Table 7-12: Authentication Initiator Timeout Values	44
Table 7-13: Authentication Responder Response Times	45
Table 8-1: Protocol Constants	46
Table A-1: TLV General Format	47
Table A-2: TLV Types	47
Table A-3: Version TLV Fields	47
Table A-4: ACD Version Encoding	48
Table A-5: XID TLV Fields	48
Table A-6: Power Source Capabilities TLV Fields	48
Table A-7: Power Source Capabilities TLV Data	49
Table A-8: Power Source Certifications TLV Fields	49
Table A-9: Cable Capabilities TLV Fields	50
Table A-10: Cable Capabilities TLV Data	50
Table A-11: Security Description TLV Fields	50
Table A-12: Security Data	50
Table A-13: FIPS/ISO Level Identifiers	51
Table A-14: Vulnerability Assessment	51
Table A-15: EAL Encodings	52
Table A-16: Protection Profile Encoding	52

Table A-17: Development Security	53
Table A-18: Certification Maintenance	53
Table A-19: Testing Method Encoding	54
Table A-20: Vulnerability Assessment	54
Table A-21: Playpen TLV Fields	55
Table A-22: Vendor Extension TLV Fields	55
Table A-23: Vendor Extension TLV Data	55
Table A-24: Extension TLV Fields	55
Table A-25: PD Product ACD TLVs	56
Table A-26: USB Product ACD TLVs	56
Table B-1: Version TLV Fields	61
Table B-2: XID TLV Fields	61
Table B-3: Power Source Capabilities TLV Fields	61
Table B-4: Security Description TLV Fields	61
Table B-5: Playpen TLV Fields	62
Table B-6: Vendor Extension TLV Fields	62

FIGURES

Figure 2-1 Sample Topology	21
Figure 6-1 Example Security Transfer Process for an Authentication Initiator	36
Figure 6-2 Example Security Transfer Process for an Authentication Responder	37
Figure 6-3 Example 612-Byte Certificate Chain Read	38
Figure A-1: Bitmap of Version TLV Data	48
Figure A-2: Bitmap of the Common Criteria Identifier	51
Figure A-3: Bitmap of the Security Analysis Identifier	53

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1.0	March 25, 2016	Initial Release
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1 Introduction

This specification provides a means for authenticating Products with regard to identification and configuration. Authentication is performed via USB Power Delivery message communications and/or via USB data bus control transactions.

USB Type-C™ Authentication allows an organization to set and enforce a Policy with regard to acceptable Products. This will permit useful security assurances in real world situations. For example:

- A vendor, concerned about product damage resulting from substandard charging devices, can set a Policy requiring that only certified PD Products be used for charging.
- A user, concerned about charging his phone at a public terminal, can set a Policy in his phone requiring that the phone only charge from certified PD Products.
- An organization, concerned about unidentifiable storage devices gaining access to corporate PC assets, can set a Policy in its PCs requiring that only USB storage devices that have been verified and signed by corporate IT are used.

1.1 Scope

This specification defines the architecture and methodology for unilateral Product Authentication. It is intended to be fully compatible with and extend existing PD and USB infrastructure. Information is provided to allow for Policy enforcement, but individual Policy decisions are not specified.

The Authentication of USB Type-C products that support Alternate Modes is allowed. However, the methods to do so are outside the scope of this specification.

1.2 Overview

This specification provides primitives for unilateral Authentication. The security model defined by this specification permits assurances that a Product is:

- Of a particular type from a particular manufacturer with particular characteristics
- Owned and controlled by a particular organization

Local Policy will determine which features need to be present in an attached Product before accessing or providing a resource (e.g. power, storage, etc.).

Product vendors can add security features beyond those listed in this specification, but the definition and implementation of those features is up to the vendor. Added features cannot alter the base specifications defined herein.