
Identification cards — Test methods —

**Part 8:
USB-ICC**

*Cartes d'identification — Méthodes d'essai —
Partie 8: USB-ICC*

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2011

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

	Page
Foreword	v
Introduction.....	vi
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions	1
4 Symbols and abbreviated terms	3
5 Testing USB Physical and Electrical Characteristics.....	3
5.1 Introduction.....	3
6 Test Set-Up.....	4
6.1 Basic Configuration	4
6.2 USB Protocol Analyzer features	5
6.3 Devices under Test.....	5
7 Test Classification and Validation Criteria	6
7.1 Test Classification.....	6
7.2 Test types.....	6
7.3 Test Targets	7
7.4 Test criticality	7
7.5 Test Acceptance and refusal criteria.....	7
8 USB Protocol Compliance Test Procedure	8
8.1 USB Protocol Tests Groups	8
8.2 Test Description Framework.....	8
8.2.1 USB signals management Testing	9
8.2.2 Timing management Test	14
8.2.3 Low level protocol and error recovery Testing.....	15
8.2.4 Cancel and Abandon Tests	19
8.2.5 USB State Machine.....	20
8.3 Standard Request management Tests	20
8.3.1 Objectives	20
8.3.2 Requirements.....	20
8.3.3 Initial condition	20
8.3.4 Nominal cases	20
8.3.5 Test List.....	21
8.3.6 Error cases.....	22
8.3.7 Common Test Conditions.....	22
8.3.8 Test List.....	23
9 Tests for compliance with CCID Class.....	24
9.1 Objectives	24
9.2 Control A Transfer Individual Request Test	24
9.2.1 Test Description	24
9.2.2 Objectives	24
9.2.3 Requirements.....	24
9.2.4 Initial USB-ICC condition:.....	25
9.2.5 Testing Set-Up	25
9.2.6 Test List: Individual Requests in Nominal and with Error Cases.....	25
9.3 Control A Transfer State Diagram Test.....	27
9.3.1 Objectives	27
9.3.2 Requirements.....	27