
Identification cards — Test methods —

Part 6:

Proximity cards

AMENDMENT 5: Bit rates of *fc/64*, *fc/32* and *fc/16*

Cartes d'identification — Méthodes d'essai —

Partie 6: Cartes de proximité

*AMENDEMENT 5: Débits binaires de *fc/64*, *fc/32* et *fc/16**



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 2007

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

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.

Amendment 5 to ISO/IEC 10373-6:2001 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 17, *Cards and personal identification*.

Identification cards — Test methods —

Part 6: Proximity cards

AMENDMENT 5: Bit rates of $fc/64$, $fc/32$ and $fc/16$

Page 2, 7.1.1 of ISO/IEC 10373-6:2001/Amd.2:2003

Add the following note at the end of the subclause:

"NOTE No load modulation test is required for bit rates of $fc/64$, $fc/32$ and $fc/16$."

Page 4, 7.2.2 of ISO/IEC 10373-6:2001/Amd.2:2003

Replace the existing text with the following:

"Tables 1 to 4 define additional test conditions to be applied for type A PICCs for different bit rates.

NOTE The definitions for timing parameters related to the amplitude are different between $fc/128$ and higher bit rates, see the future Amendment 2 to ISO/IEC 14443-2:2001."

Page 4, 7.2.2 of ISO/IEC 10373-6:2001/Amd.2:2003

Replace the title of Table 1 with the following: "Table 1 – Additional test conditions for a bit rate of $fc/128$ "

Page 4, 7.2.2 of ISO/IEC 10373-6:2001/Amd.2:2003

Insert the following table and note after Table 1:

Table 2 — Additional test conditions for a bit rate of $fc/64$

Condition	H (A/m)	t_1	t_2	t_3	a
1	1,5	$20/fc$	$14/fc$	$6/fc$	0,2
2	1,5	$20/fc$	$16/fc$	$7/fc$	$\leq 0,05$
3	4,5	$20/fc$	$14/fc$	$6/fc$	0,2
4	4,5	$20/fc$	$16/fc$	$7/fc$	$\leq 0,05$
5	7,5	$20/fc$	$14/fc$	$6/fc$	0,2
6	7,5	$20/fc$	$16/fc$	$7/fc$	$\leq 0,05$

NOTE The timing t_3 for all higher bit rates is defined in 8.1.2.2.

Page 4, 7.2.2 of ISO/IEC 10373-6:2001/Amd.2:2003

Insert the following table after the new Table 2:

Table 3 — Additional test conditions for a bit rate of $fc/32$

Condition	H (A/m)	t_1	t_2	t_3	a
1	1,5	$10/fc$	$6/fc$	$6/fc$	0,35
2	1,5	$10/fc$	$7/fc$	$7/fc$	$\leq 0,15$
3	4,5	$10/fc$	$6/fc$	$6/fc$	0,35
4	4,5	$10/fc$	$7/fc$	$7/fc$	$\leq 0,15$
5	7,5	$10/fc$	$6/fc$	$6/fc$	0,35
6	7,5	$10/fc$	$7/fc$	$7/fc$	$\leq 0,15$

Page 4, 7.2.2 of ISO/IEC 10373-6:2001/Amd.2:2003

Insert the following table after Table 3:

Table 4 — Additional test conditions for a bit rate of $fc/16$

Condition	H (A/m)	t_1	t_2	t_3	a
1	1,5	$5/fc$	$3/fc$	$6/fc$	0,6
2	1,5	$5/fc$	$3/fc$	$7/fc$	$\leq 0,3$
3	4,5	$5/fc$	$3/fc$	$6/fc$	0,6
4	4,5	$5/fc$	$3/fc$	$7/fc$	$\leq 0,3$
5	7,5	$5/fc$	$3/fc$	$6/fc$	0,6
6	7,5	$5/fc$	$3/fc$	$7/fc$	$\leq 0,3$

Page 4, 7.2.2.1 of ISO/IEC 10373-6:2001/Amd.2:2003

Replace the existing text with the following:

"Under the conditions defined in Table 1 the PICC shall answer to a REQA with ATQA.

A PICC supporting the optional $fc/64$ bit rate shall operate under the conditions defined in Table 2 after selection of a bit rate of $fc/64$. This PICC shall respond correctly to an I-block transmitted at a bit rate of $fc/64$.

A PICC supporting the optional $fc/32$ bit rate shall operate under the conditions defined in Table 3 after selection of a bit rate of $fc/32$. The PICC shall respond correctly to an I-block transmitted at a bit rate of $fc/32$.

A PICC supporting the optional $fc/16$ bit rate shall operate under the conditions defined in Table 4 after selection of a bit rate of $fc/16$. The PICC shall respond correctly to an I-block transmitted at a bit rate of $fc/16$."

Page 4, 7.2.2.2 of ISO/IEC 10373-6:2001/Amd.2:2003

Replace the existing text with the following:

"The test report shall confirm the intended operation at the mandatory $fc/128$ bit rate under the conditions defined in Table 1. For PICCs supporting one or more of the optional high bit rates the test report shall confirm the intended operation at the supported bit rates under the conditions defined in 7.2.2.1."