

INTERNATIONAL
STANDARD

**ISO/IEC
9316**

Second edition
1995-11-01

**Information technology — Small
Computer System Interface-2**

Technologies de l'information — Interface «Small Computer System-2»



Reference number
ISO/IEC 9316:1995(E)

Contents

	Page
1 Scope	1
2 Normative references	2
3 Definitions, symbols and abbreviations	3
3.1 Definitions	3
3.2 Symbols and abbreviations	5
4 General	6
4.1 Overview	6
4.2 Conventions	7
5 Physical characteristics	8
5.1 Physical description	8
5.2 Cable requirements	8
5.2.1 Single-ended cable	8
5.2.2 Differential cable	9
5.2.3 Cable requirements for fast synchronous data transfer	9
5.3 Connector requirements	9
5.3.1 Non-shielded connector requirements	9
5.3.1.1 Non-shielded connector alternative 1 - A cable	9
5.3.1.2 Non-shielded connector alternative 2 - A cable	10
5.3.1.3 Non-shielded connector - B cable	10
5.3.2 Shielded connector requirements	15
5.3.2.1 Shielded connector alternative 1 - A cable	15
5.3.2.2 Shielded connector alternative 2 - A cable	15
5.3.2.3 Shielded connector - B cable	15
5.3.3 Connector contact assignments	20

© ISO/IEC 1995

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 the publisher.

ISO/IEC Copyright Office • Case postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

5.4 Electrical description	25
5.4.1 Single-ended alternative	25
5.4.1.1 Output characteristics	25
5.4.1.2 Input characteristics	25
5.4.2 Differential alternative	26
5.4.2.1 Output characteristics	26
5.4.2.2 Input characteristics	26
5.4.3 Terminator power	26
5.4.4 RESERVED lines	29
5.5 SCSI bus	30
5.6 SCSI bus signals	32
5.6.1 Signal values	33
5.6.2 OR-tied signals	33
5.6.3 Signal sources	33
5.7 SCSI bus timing	34
5.7.1 Arbitration delay	35
5.7.2 Assertion period	35
5.7.3 Bus clear delay	35
5.7.4 Bus free delay	35
5.7.5 Bus set delay	36
5.7.6 Bus settle delay	36
5.7.7 Cable skew delay	36
5.7.8 Data release delay	36
5.7.9 Deskew delay	36
5.7.10 Disconnection delay	36
5.7.11 Hold time	36
5.7.12 Negation period	36
5.7.13 Power-on to selection time	36
5.7.14 Reset to selection time	36
5.7.15 Reset hold time	37
5.7.16 Selection abort time	37
5.7.17 Selection time-out delay	37
5.7.18 Transfer period	37
5.8 Fast synchronous transfer option	37
5.8.1 Fast assertion period	37
5.8.2 Fast cable skew delay	37
5.8.3 Fast deskew delay	37
5.8.4 Fast hold time	37
5.8.5 Fast negation period	38
6 Logical characteristics	39
6.1 SCSI bus phases	39
6.1.1 BUS FREE phase	39
6.1.2 ARBITRATION phase	40
6.1.3 SELECTION phase	40
6.1.3.1 SELECTION time-out procedure	41
6.1.4 RESELECTION phase	41
6.1.4.1 RESELECTION	41
6.1.4.2 RESELECTION time-out procedure	42
6.1.5 Information transfer phases	42
6.1.5.1 Asynchronous information transfer	43
6.1.5.2 Synchronous data transfer	43
6.1.5.3 Wide data transfer	44