

# Plug and Play SCSI Specification

Version 1.0  
March 30, 1994

Copyright 1994 by Adaptec, AT&T Global Information Solutions, Digital Equipment Corporation, Future Domain, Maxtor, and Microsoft.

Permission is granted to copy and distribute this document for purpose of review, comment, and development of SCSI PnP products.

POINTS OF CONTACT:

Vince Bastiani Adaptec	EMAIL 71053.3431@compuserve.com FAX 408-957-7145
John Lohmeyer AT&T GIS (NCR Microelectronics)	EMAIL john.lohmeyer@ftcollinsco.ncr.com FAX 719-597-8225
Edward Gardner Digital Equipment	EMAIL gardner@ssag.enet.dec.com FAX 719-548-2451
Jeff Epstein Future Domain	EMAIL jeffe@fdc.mhs.compuserve.com FAX 714-253-0913
Evan Steiner Maxtor	EMAIL evan_steiner@Maxtor.com FAX 408-432-4510
Steve Timm Microsoft	EMAIL stevetim@microsoft.com FAX 206-936-7329

Plug and Play Forum - login to CompuServe, enter 'go plugplay', leave messages in SCSI/IDE section.

SCSI BBS: 719-574-0424  
SCSI Reflector (to join): scsiadm@wichitaks.ncr.com  
(to post): scsi@wichitaks.ncr.com  
ftp site: ncrinfo.ncr.com (/pub/standards/pnp SCSI directory)

Microsoft does not make any representation or warranty regarding this specification or any product or item developed based on this specification. Microsoft disclaims all express and implied warranties, including but not limited to the implied warranties of merchantability, fitness for a particular purpose and freedom from infringement. Without limiting the generality of the foregoing, Microsoft does not make any warranty of any kind that any item developed based on this specification, or any portion of it, will not infringe any copyright, patent, trade secret or other intellectual property right of any person or entity in any country. It is your responsibility to seek licenses for such intellectual property rights where appropriate. Microsoft shall not be liable for any damages arising out of or in connection with the use of this specification, including liability for lost profit, business interruption, or any other damages whatsoever. Some states do not allow the exclusion or limitation of liability for consequential or incidental damages; the above limitation may not apply to you.

## TABLE OF CONTENTS

1. Scope.....	7
2. Reference documents .....	7
3. Glossary and Abbreviations .....	7
3.1. Glossary.....	7
3.2. Abbreviations .....	8
4. Conformance .....	8
5. Hardware .....	8
6. Connectors .....	9
6.1. Cables.....	9
6.2. Terminator requirements .....	9
6.3. Device Power.....	10
6.4. SCSI ID assignment .....	10
6.4.1. Automatic SCSI ID assignment .....	10
6.4.2. Default SCSI ID's.....	10
6.4.3. SCAM ID assignment algorithm .....	11
7. System configurations .....	11
7.1. Add-in SCSI Design Alternative .....	12
7.2. Motherboard SCSI Design Alternative .....	13
7.3. Mixed configuration Example.....	16
8. X86 Software Issues.....	16
8.1. Geometry translation .....	16
9. Generic Software Issues.....	17
9.1. READ CAPACITY command.....	17
9.2. INQUIRY command.....	17
9.3. Synchronous negotiation .....	17
9.4. Virtual DMA services (VDS).....	17
9.5. Device driver architecture .....	17
9.6. Software configuration .....	18
9.7. Boot considerations .....	18
APPENDIX A - CHS mapping.....	19
APPENDIX B - Checklist of compliance requirements .....	21
APPENDIX C - SCSI ID Assignment Examples .....	23

**LIST OF TABLES**

Table 1 - As shipped default SCSI ID assignment ..... 11

**LIST OF FIGURES**

Figure 1 - SCSI Icon ..... 9  
Figure 2 - Add-in SCSI Design ..... 12  
Figure 3 - Motherboard SCSI Design ..... 14  
Figure 4 - Mixed Configuration Example ..... 16

## Foreword

The Plug and Play SCSI (PnP SCSI) effort was undertaken as an extension to Plug and Play ISA. Microsoft encouraged host adapter manufacturers to participate in this effort to develop an easy to use SCSI environment in the personal computer marketplace.

PnP SCSI is a profile, not a standard. PnP SCSI references the SCSI-2 standard and portions of the draft SCSI-3 standards. PnP SCSI selects specific options and features from these documents.

This specification is part of the PnP family and is designed to facilitate usage of the Small Computer System Interface (SCSI) on personal computing products. This document is an open, public specification supplementing existing SCSI specifications. This specification is intended to be platform and operating system independent.

Companies which contributed to developing the initial draft specification include: Adaptec, AT&T Global Information Solutions (formerly NCR), Digital Equipment Corporation, Future Domain, Maxtor, and Microsoft.

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.