PC CARD STANDARD

Volume 1

Overview and Glossary

PCMCIA
JEIDA

PCMCIA (Personal Computer Memory Card International Association)
2635 North First Street, Suite 209
San Jose, CA 95134 USA
+1-408-433-2273
+1-408-433-9558 (Fax)
http://www.pc-card.com

JEIDA (Japan Electronic Industry Development Association)
Kikai Shinko Kaikan, 3-5-8, Shibakoen
Minato-ku, Tokyo 105, JAPAN
+81-3-3433-1923
+81-3-3433-6350 (Fax)
http://www.pc-card.gr.jp

Cover Design: Greg Barr

Document No. 0299-01-2000

First Printing, February 1999

CONTENTS

1. INTRODUCTION

This Overview describes the Personal Computer Memory Card International Association (PCMCIA) and the Japan Electronic Industry Development Association (JEIDA) PC Card™ Standard which is the result of countless hours of effort by the members of JEIDA and PCMCIA. PCMCIA and JEIDA are grateful for and acknowledge the dedicated efforts of the PCMCIA and JEIDA staff and volunteer members in the creation and production of this Standard.

1.1 PC Card Standard Overview

The Personal Computer Memory Card International Association has an international membership comprising hundreds of member companies from all disciplines: computer manufacturers, semiconductor companies, peripheral vendors, software developers, and more. The Japan Electronic Industry Development Association was established in 1958 as a non-profit organization interested in contributing to Japan's economic prosperity by stimulating development in the electronics industry. PCMCIA and JEIDA have developed a standard for a credit card-sized adapter, called a 'PC Card' that does for notebook and other portable computers what the AT bus did for desktop PCs — provide universal, non-proprietary expansion capability.

The ***Physical Specification*** defines a 68-pin interface between the peripheral card and the PC Card 'socket' into which it gets inserted. It also defines two standard form factors, full-size and Small PC Cards, each in three thicknesses, called Type I, Type II and Type III. Type I, the smallest form factor, often used for memory cards, measures 3.3 mm in thickness. Type II, available for those peripherals requiring taller components such as LAN cards and modems, measures 5 mm thick. Type III is the tallest form factor and measures 10.5 mm thick. Type III PC Cards can support small rotating disks and other tall components. Smaller size cards can always fit into larger sockets but the reverse is not true.

The ***Electrical Specification*** defines three basic classes of PC Cards: 16-bit PC Cards, 32-bit CardBus PC Cards, and Custom Interface PC Cards. Defined are characteristics of each interface including power, signaling, configuration, and timing requirements. Also, the ***PC Card Host System Specification*** describes host-side power management and a thermal ratings system.

In addition to specifying electrical and physical requirements, the ***PC Card Standard*** has also defined a software architecture to provide "plug and play" capability across the widest possible range of products. The ***Socket Services Specification*** defines a BIOS level interface that masks the hardware implementation from card vendors' drivers. It identifies how many sockets are in the host and when a card is inserted or removed from a socket. It prevents the card driver from having to talk directly to a specific chip. The ***Card Services Specification*** defines an Application Programming Interface that interfaces to Socket Services and automatically provides management of system resources, such as interrupt assignments and memory windows, for cards as they become active in the system. Also, the ***Metaformat Specification*** defines the structure and contents of card description information called the Card Information Structure.

The ***PC Card Standard*** also includes three application specific specifications. The ***Media Storage Formats Specification*** defines how data are to be formatted on some PC Card storage devices. The ***PC Card ATA Specification*** defines the operation of mass storage devices using the ANSI ATA Interface for Disk Drives in the PC Card environment. The ***XIP Specification*** defines a method to directly execute applications from ROM without loading the image into RAM. Also included is a set of ***Guidelines*** intended to assist developers with implementation examples along with further explanations of the ***PC Card Standard***.

DOCKET ALARM

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.