Model SDDC-05A

PCMCIA Card Drive

FEATURES

- *Fully PCMCIA 2.1 & JEIDA 4.1 Compliant Drive*
- *Supports Type I, II & III 68-Pin Cards*
- *Flexible I/O, Memory & Interrupt Mapping*
- *Bootable and Non-Bootable Models*
- *Automatic Software Installation*
- *Standard Card & Socket Services for Plug-&-Play Operation*
- *All CMOS, Low Power Design*

DESCRIPTION

Typical Applications

- Transfer Data From PCMCIA Cards Used in Notebook & Laptop Computers
- Share Notebook and Laptop PCMCIA Peripherals with an ISA Bus Computer
- Bootable Disk Drive Replacement for Diskless Systems
- Removable Data Storage for High Security Applications
- I/O Expansion Bus for Fax/Modems, Networks and Hard Disk Drives
- Storage and I/O Interface for ISA Embedded Computers

Overview

The Model SDDC Series Card Drive brings performance and universal PCMCIA compatibility to the desktop computer. The SDDC supports all types of PCMCIA memory and I/O cards including SRAM, Flash, ATA hard drives, fax/modems, network, SCSI, pager, GPS and others. Designed for commercial and industrial users, the SDDC offers two fully independent PCMCIA compliant sockets with all of the features required for reliable operation in desktop computers, embedded systems and portable ruggedized computers.

The dual socket card drive installs in a 16-bit ISA bus expansion slot and offers two mounting combinations: 1) two PC-Card sockets on the adapter card; 2) two sockets in a 3.5" floppy drive bay enclosure. Installation of additional PC-Card drives allows up to eight PC-Card sockets in one system.

Software support includes self-installing and configuring PCMCIA compliant Card and Socket Services. Standard drivers included with the SDDC allow memory and hard drive cards to be formatted and used just like another disk drive in the system. Custom drivers from PCMCIA card manufacturers allow the SDDC to use virtually any PCMCIA card. Software updates on floppy disks prevent drive obsolescence as new PCMCIA technologies develop.

Special features include an audio speaker for fax/modem operations, card ejectors for each memory card socket, LEDs to indicate card activity, a 6-layer adapter board for reliable operation, a built-in Flash card programming power supply and a boot ROM (on bootable models).

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DESCRIPTION CONT.

Card Drive

Each PCMCIA card socket operates independently with individual power controls, fully buffered 26-Bit address bus, 16-bit data bus, and status and control signals. Status from the PCMCIA card socket includes write protect, battery voltage detect, card detect, card changed and power on/off. Card control signals enable access to common memory, attribute memory and I/O addressing modes.

Card power control includes independent VPP and VCC switches for each socket to remove power from an idle PC-Card. This feature supports the low power operation demanded by "Green PC" operation. Many PC-Card Flash memory cards require a clean and accurate VPP power supply for programming and erasing. to overcome the sometimes noisy and poorly regulated 12VDC supply found in some computers, the card drive includes its own built-in power supply.

To accommodate the wide range of memory. I/O and interrupt configurations found in a computer, the SDDC includes five memory mapped windows, two I/O windows and interrupt steering for twelve interrupts for each PCMCIA socket. Flexible memory mapping permits locating the PCMCIA memory window in upper memory or extended memory. I/O space maps throughout the computer's I/O map and programmable interrupt selection includes the standard ISA interrupts.

Software

Installation and configuration is easy using the automatic install and configuration utilities included with the system. Hot swap and Plug-and-Play operation allows new cards to be inserted and recognized automatically without reconfiguring the system. An industry standard implementation of Card and Socket Services gives the SDDC a universal system software interface for PCMCIA cards. Card and Socket Services vendors compatible with the SDDC include American Megatrands (AMI), Phoenix Technology and SystemSoft.

SPECIFICATIONS

I/O Addressing
3E0-3E1H or 3E2/3E3H

Flash ROM Addressing (bootable versions)
0x0000 to 0xF800

Transfer Rate (SRAM card)
>2Mbytes per second on a 33MHz 80486DX

Card Types Supported
Type I, II & III 68-pin PCMCIA/JEIDA SRAM, Flash, fax/modem, Ethernet, token ring, ATA hard drive, pager, SCSI, GPS and other standard PCMCIA cards

Indicator LEDs
Busy for each socket (card power on)

Power Requirements (w/o card)
Active: 5VDC @ 75mA typical
Standby: 5VDC @ 25mA typical

Card Slot Power Source
VCC: 5VDC @ 1A max
VPP: 5VDC @ 120mA max, 12VDC @ 120mA max

Temperature Range
Operating: 0 to 60°C
Storage: -20 to 85°C

Humidity
0 to 90% RHNC

ORDERING GUIDE

NON-BOOTABLE

Model SDDC-02A
PC Card adapter, internal, w/ floppy drive escutcheon

Model SDDC-01A

PC Card adapter, rear panel access

BOOTABLE

Model SDDC-05A
PC Card adapter, internal, w/ floppy drive escutcheon

Model SDDC-04A
PC Card adapter, rear panel access

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