

OPERATIONS MANUAL PCM-CFLASH

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GENERAL INFORMATION

1.1 Features

- PC/104 Compatible Flash Disk Adapter Module
- Supports Compact Flash Modules
- Master/Slave operation for multiple drive support
- LED provides visual status indication of data transfer
- Two IDE input/output connectors for cabling flexibility
- +5 Volt only operation

1.2 General Information

The PCM-CFLASH is a PC/104 compatible adapter module designed specifically to adapt Compact Flash Modules for rugged embedded systems use. The adapter provides for master/slave selection as well as providing a visual drive status indicator. Two IDE connectors are provided for maximum cabling flexibility. The Compact Flash Drives are IDE interfaced and are fully software compatible with standard IDE hard disks. This compatibility at the hardware level means that special software drivers are not required.

1.3 Specifications

1.3.1 Electrical

Power Requirements : +5V +/-5% at 100mA typ.

1.3.2 Mechanical

Dimensions : 3.6" X 3.8" X 0.6"

PC-Board : FR-4 Epoxy Glass with 2-signal layers, plated through holes and screened component legend.

Jumpers : 0.025" square posts on 0.10" centers

Connectors : IDE I/O - IDH-40-LP

Power Input : 4-pin Molex

1.3.3 Environmental

Operating Temperature : -40° C to +85° C using industrial drives

Non Condensing Relative Humidity : 8% to 95%

Vibration : 15 G Peak to Peak

Shock : 2000 G Max.

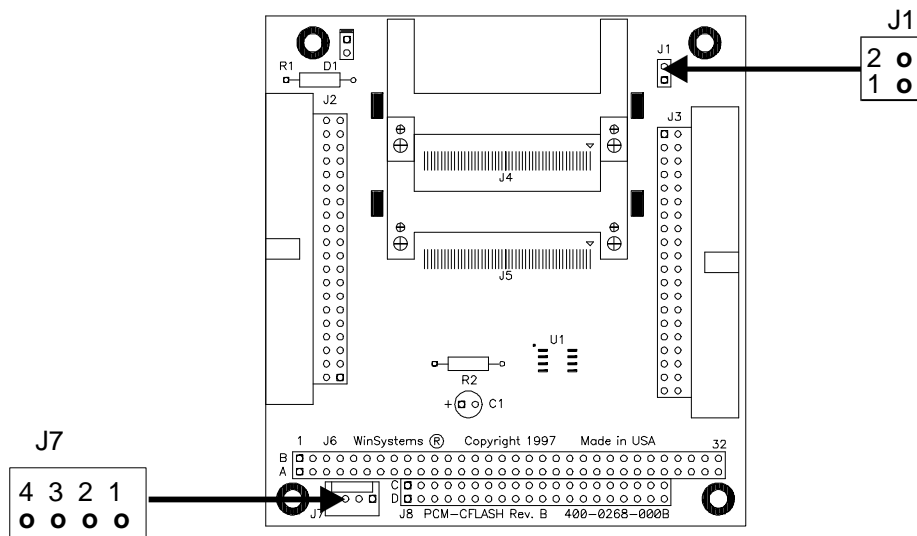
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PCM-CFLASH Technical Reference

2.1 Introduction

This section of the manual is intended to provide the necessary information regarding configuration, and usage of the board. WinSystems maintains a Technical Support Group to help answer questions regarding configuration and usage of the PCM-CFLASH module. For answers to questions not adequately addressed in this manual, contact Technical Support at (817) 274-7553 between 8AM and 5PM Central time.

2.2 Master/Slave Mode Selection



The PCM-CFLASH can be used in any of four modes.

1. Stand-alone, no other IDE device
2. As a master to a slave PCM-CFLASH
3. As a secondary drive to another PCM-CFLASH
4. As a secondary drive to an IDE hard disk

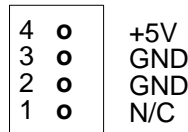
NOTE : The PCM-CFLASH cannot be the master to an IDE hard disk.

The jumper block at J1 selects master/slave mode as shown here :



2.3 Auxiliary Power Input

When the PCM-CFLASH is not used on a PC/104 stack, power must be supplied via the connector at J7. The pin definitions for J7 are shown here :



2.4 Flash Disk Initialization

The SanDisk modules that can be used with the PCM-CFLASH are fully IDE fixed disk compatible and are initialized and formatted identically to an IDE fixed disk. The steps below are provided as a checklist for DOS initialization. Refer to the appropriate fixed disk initialization instructions for other operating systems.

1. Use the system setup menu to enter the Cylinders, Heads, and Sectors. If the system is so equipped, auto detection is supported. The table below lists the common values for the SanDisks that were available at the time this manual was written.

SanDisk P/N	SanDisk Size	Cylinders	Heads	Sectors
SDCFB-2	2MB	123	2	16
SDCFB-4	4MB	123	2	32
SDCFB-10	10MB	320	2	32
SDCFB-15	15MB	458	2	32

2. Use the DOS FDISK utility to create a primary DOS partition and make it active for booting.
3. Format the disk with the DOS format utility. If bootability is desired remember to use the /S switch when formatting.



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1. Description and quantity of the product(s) to be returned including its serial number.
2. Reason for the return.
3. Invoice number and date of purchase (if available), and original purchase order number.
4. Name, address, telephone and FAX number of the person making the request.
5. Do not debit WinSystems for the repair. WinSystems does not authorize debits.

After the RMA number is issued, please return the products promptly. Make sure the RMA number is visible on the outside of the shipping package.

The customer must send the product freight prepaid and insured. The product must be enclosed in an anti-static bag to protect it from damage caused by static electricity. Each bag must be completely sealed. Packing material must separate each unit returned and placed as a cushion between the unit(s) and the sides and top of the shipping container. WinSystems is not responsible for any damage to the product due to inadequate packaging or static electricity.