

Reference Manual

VL-CFA-1

IDE Adapter for Type I
and II CompactFlash
Cards and Compact
Hard Drives

CompactFlash



VERSALOGIC
CORPORATION



Product Release Notes

This page includes recent changes or improvements that have been made to this product. These changes may affect its operation or physical installation in your application. Please read the following information.

Rev 2 Release

- Production release of VL-CFA-1d and VL-CFA-1e, both with 3.3V module/signaling for improved reliability.
- VL-CFA-1b and VL-CFA-1c obsolete.
- VL-CFA-1d was discontinued as of July 18, 2007. Availability limited to stock on hand. See product advisory [VT1530](#).

Rev 1 Release

Production release.

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and Compact Hard Drives

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Description

The CFA-1 CompactFlash Adapter provides a low cost, rugged, and flexible means to add a socket for removable CompactFlash cards to an embedded computer that has a standard IDE interface. CompactFlash cards have a system interface that is electrically and functionally identical to that of rotating media IDE hard disk drives, so they are fully supported by all operating systems and application programs without the need for boot ROMs or drivers.

The CompactFlash Adapter is compatible with both Type I and Type II CompactFlash modules. Type II modules include IBM Microdrives and larger capacity Flash modules.

Present and former CFA-1 adapter models are described below:

- **VL-CFA-1e Remote mount (0.1 inch).** Supplies 3.3V to the CompactFlash module. This adapter features a male 40-pin, 0.1" IDE connector for direct cabling to a 3.5" IDE interface (the style found on most PCs). Any convenient cable length, up to 18 inches, may be used between the adapter and the IDE connector on the motherboard. A power adapter cable (CBL-0201) is included to connect the 2-pin power connector on the CFA-1e to a standard 4-pin IDE drive power connector.
- **VL-CFA-1d Remote mount (2 mm).** Supplies 3.3V to the CompactFlash module. This adapter features a male 44-pin, 2mm IDE connector for direct cabling to a 2.5" IDE interface. Any convenient cable length, up to 18 inches, may be used between the adapter and the IDE connector on the motherboard.

Note: The VL-CFA-1d was discontinued as of July 18, 2007. See product advisory [VT1530](#).

Features

- Access CompactFlash cards like an IDE Drive via direct cable connection
- Compatible with Type I and II CompactFlash™ standards
- Mounting holes for rigid attachment
- Push-button eject mechanism pushes card at two points for reliable ejection
- Power and drive activity LEDs
- CompactFlash card may be selected as either master or slave drive
- Works with any operating system having IDE support

Technical Specifications

Specifications are typical at 25°C with 5.0V supply unless otherwise noted.

Board Size:

2.70" x 2.625" x 0.4"

Storage and Operating Temperature:

Limited only by CompactFlash card specifications

Power Requirements:

+5V \pm 5%, Current draw depends on CompactFlash module.

Power Interface Connector

VL-CFA-1d : None

VL-CFA-1e : 2-pin power

IDE Interface:

VL-CFA-1d: 44 pin standard 2mm IDC male connector, unshrouded

VL-CFA-1e: 40 pin standard 0.1" IDC male connector, shrouded

Note: Do not use 40-pin/80 conductor UDMA cables

CompactFlash Interface:

One socket, master or slave

Voltage Supplied to CompactFlash Module:

VL-CFA-1d : +3.3V \pm 2%.

VL-CFA-1e : +3.3V \pm 2%.

Compatibility:

Type I and II CompactFlash cards

Specifications are subject to change without notice.

Installation

Make sure that system power is off, and connect the IDE cable from the computer system to the VL-CFA-1. For the 40-Pin version, also connect the power cable from an IDE 4-pin power connector to the 2-pin CFA-1 power connector using CBL-0201.

Configure the CFA-1 as a Master (V1 in) or Slave (V1 out) drive.

Install the CompactFlash Card into the socket.

Turn power on and boot the system and enter CMOS Setup. Configure CMOS settings for Auto Configuration of the IDE drive (as you would for any other IDE drive).

Save the configuration and reboot the system. The CFA-1 drive should be accessible as C: for the Master Drive configuration and D: for the Slave.

The CFA-1 drive is treated the same as any other IDE drive by system software. Please note that CompactFlash cards have a limited number of write cycles (usually 100,000 to 1,000,000) that can be performed before the drive integrity is compromised.

Technical Support

If you have problems that this manual can't help you solve, first visit the VersaLogic Technical Support Knowledge Base at www.versalogic.com. If you have further questions, contact VersaLogic for technical support at (541) 485-8575. You can also reach our technical support engineers via e-mail at Support@VersaLogic.com.

VersaLogic Support Website

www.versalogic.com

REPAIR SERVICE

If your product requires service, you must obtain a Returned Material Authorization (RMA) number by calling (541) 485-8575.

Please provide the following information:

- Your name, the name of your company, and your phone number
- The name of a technician or engineer who we can contact if we have questions
- Quantity of items being returned
- The model and serial number (bar code) of each item.
- A description of the problem
- Steps you have taken to resolve or repeat the problem
- The return shipping address

Warranty Repair

All parts and labor charges are covered, including return shipping charges for UPS Orange (3 Day) Air delivery to United States addresses.

Non-warranty Repair

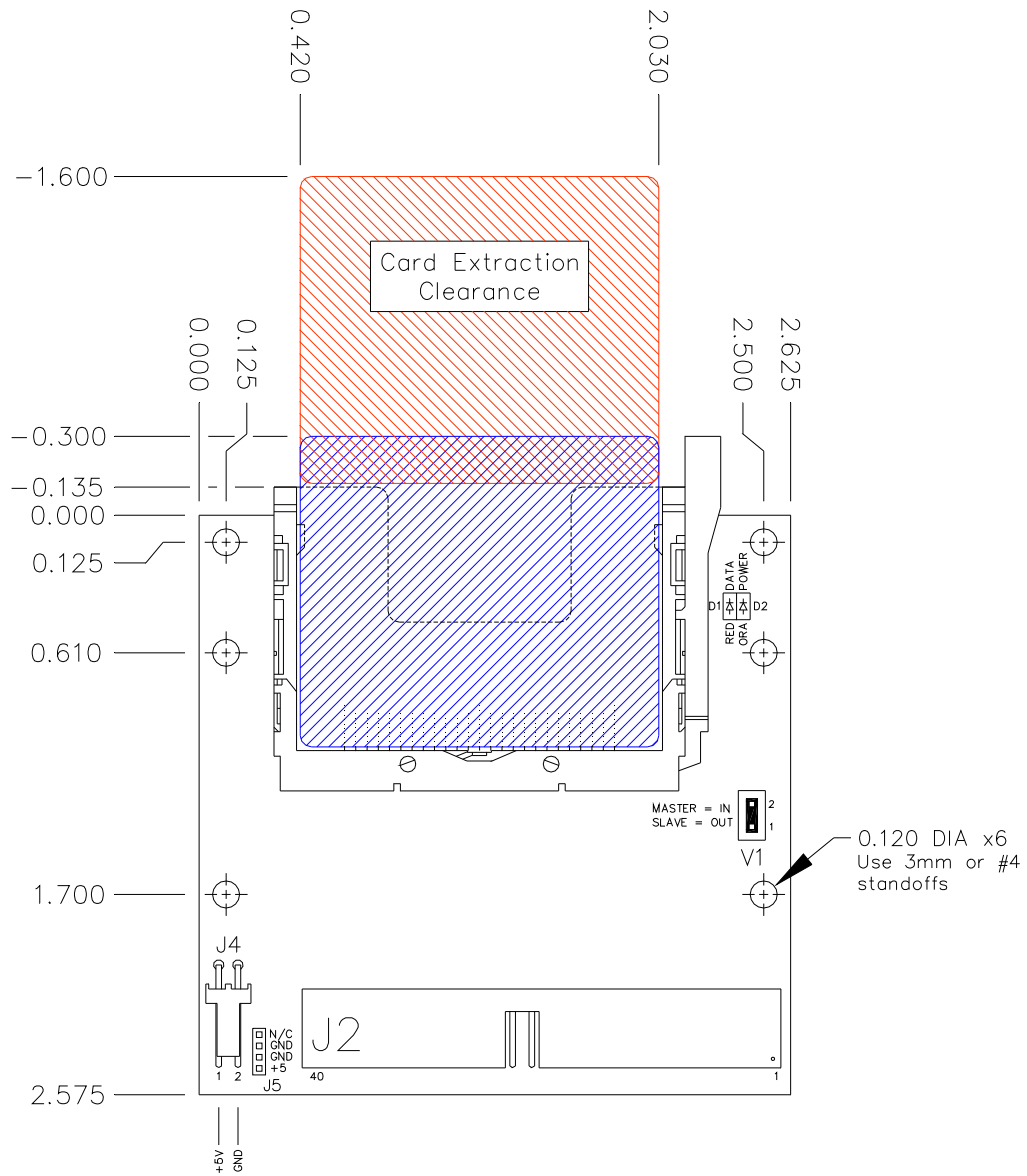
All non-warranty repairs are subject to diagnosis and labor charges, parts charges, and return shipping fees. We will need to know what shipping method you prefer for return back to your facility, and we will need to secure a purchase order number for invoicing the repair.

Note

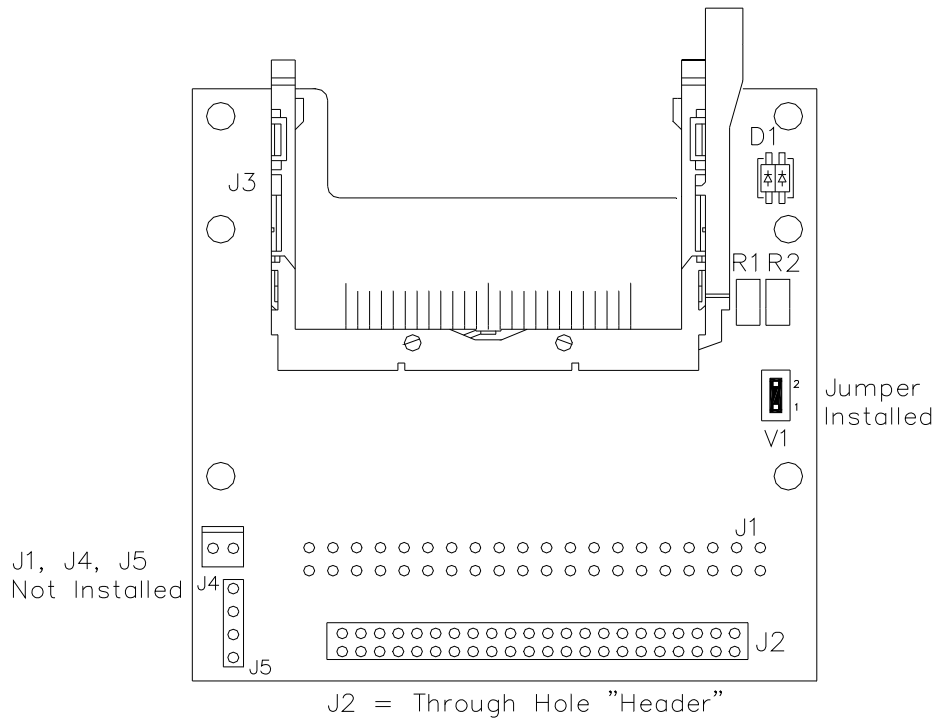
Please mark the RMA number clearly on the outside of the box before returning. Failure to do so can delay the processing of your return.

Physical Dimensions

Dimensions shown in inches.



CFA-1d Diagram



Note: CFA-1d was discontinued as of July 18, 2007. See product advisory [VT1530](#).