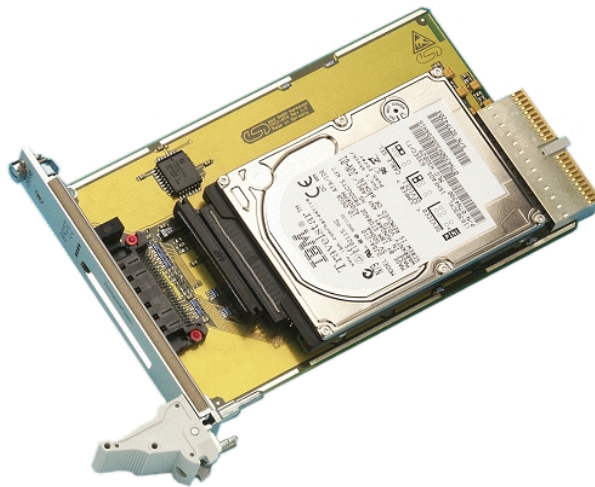


CPCI-HD

On-Board HD-Drive and CompactFlash Slot



Hardware Manual

| | |
|-----------------------|---|
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| | |
|---------------------|------------------|
| PCB version: | CPCI-HD Rev. 1.1 |
|---------------------|------------------|

Changes in the chapters

The changes in the user's manual listed below affect changes in the **hardware**, as well as changes in the **description** of the facts only.

| Chapter | Changes versus previous version |
|---------|---------------------------------|
| - | First version |
| - | |

Further technical changes are subject to change without notice.

NOTE

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1. Overview

1.1 Description of CPCI-HD Module

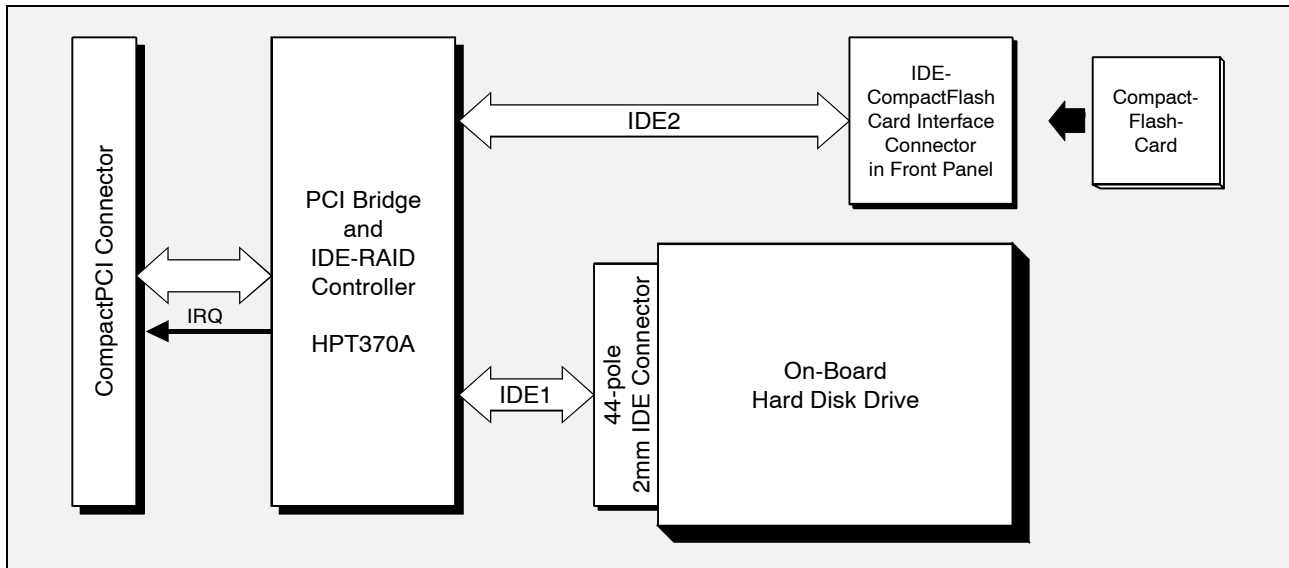


Fig. 1.1: Block-circuit diagram of the CPCI-HD module

The CPCI-HD is a CompactPCI board in Euro format and offers an on-board hard disk drive and a CompactFlash card interface.

The CPCI-HD module is equipped with a HPT370A IDE-drive controller which supports two IDE-channels. One channel is used to control the local HD-drive and the other channel is used to control the CompactFlash slot.

The CompactFlash slot is in the front panel. The CompactFlash card is accessed in 'True IDE'-mode.

The board is also available without HD-drive. Up to two IDE-devices can then be connected via a 44-pole ribbon cable.

LEDs in the front panel show the status of the board.



1.2 Summary of Technical Data

1.2.1 General Technical Data

| | |
|---------------------|---|
| Ambient temperature | 0...50 °C |
| Humidity | max. 90 %, non-condensing |
| Power supply | via CompactPCI-bus, nominal voltage: 5 V, 3.3 V |
| Connectors | X31 (44-pin IDE-connector) - HD-drive connector, 2 mm pitch X40 (50-pin CompactFlash board connector, AMP-C- FLASH) - CompactFlash card slot X100 (132-pin post connector) - CompactPCI-board connector |
| Dimensions | 100 mm x 160 mm |
| Weight | 250 g |

Table 1.1: General technical data



1.2.2 CompactPCI Bus

| | |
|----------------------|---|
| Host bus | PCI-Bus according to PCI Local Bus Specification 2.0 |
| PCI-data/address bus | 32 bits |
| Controller | HPT370A |
| Interrupt | Interrupt signal A |
| Board dimensions | according to CompactPCI-Specification, Rev. 2.0 |
| Connectors | |
| Connector Coding | Universal-Board, not keyed (3,3 V or 5 V signalling voltage) |

Table 1.2: CompactPCI-bus interface

1.2.3 Hard Disk Drive

| | |
|--------------------|---|
| Number | 1 Hard-Disk-Drive |
| Data transfer mode | UDMA 33 |
| IDE-controller | HPT370A |
| Hard disk drive | 2.5" drive, capacity: 10 GB (other capacities on request), access time: 12 ms (for drive type DJSA-210) |

Table 1.3: HD-drive

1.2.4 CompactFlash Interface

| | |
|--------------------|--|
| Number | 1 CompactFlash slot |
| Data transfer mode | PIO 0 |
| IDE-controller | HPT370A |
| CompactFlash | according to CompactFlash™ specification, Type I CompactFlash-card slot, 'True IDE'-mode, 3.3 V supply voltage |

Table 1.4: CompactFlash interface



Overview

1.2.5 Software Support

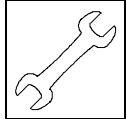
The CPCI-HD module works with the standard-system drivers of VxWorks, Linux, QNX or Windows NT/2000.

1.2.6 Order Information

| Type | Properties | Order No. |
|---------------|--|-----------|
| CPCI-HD | 10 GB Hard Disk Drive, CompactFlash Interface | I.2310.02 |
| CPCI-CF | as CPCI-HD, but without HD-drive | I.2310.10 |
| CPCI-HD-ME *) | English manual | I.2310.21 |

*) The manual is free, if it was ordered together with the product.

Table 1.5: Order information



2. Hardware Installation

Attention!

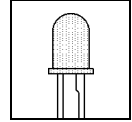
Electro-static discharges may cause damage to electronic components. In order to avoid this please make sure to follow the steps below *before* touching the CAN-module:

- Switch off the power supply of your computer, but leave it connected to mains.
- Now touch the metal case of the computer to discharge yourself.
- Even your clothes must not touch the CAN-module.

Installation:

1. Switch off your computer and all connected peripheral devices (monitor, printers, etc.).
2. Discharge yourself as described above.
3. Disconnect the computer from mains.
4. Insert the CPCI-HD module into a free CompactPCI slot.
5. Attach the module by means of the front panel screws.
6. Connect the computer to mains again.
7. Switch on the computer and the peripheral devices.
8. End of hardware installation.
9. Now, you can install the HD-drive and the CompactFlash interface. For further information refer to the documentation of your operating system.

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3. Front Panel View with LED-Display

The Module has got four green LEDs in the front panel.

3.1 LEDs in the Front Panel

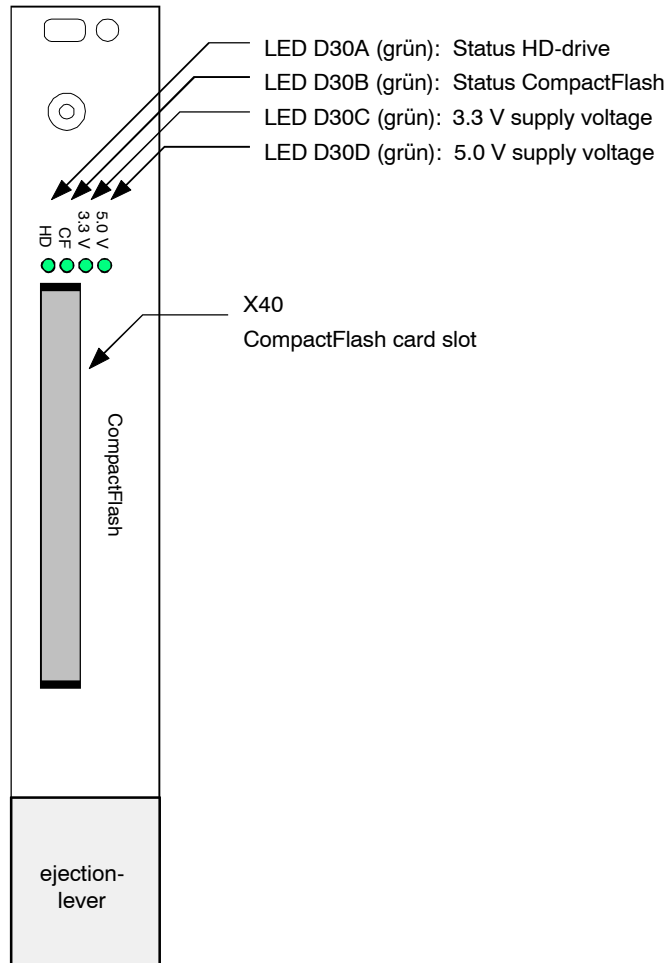
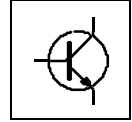


Fig. 3.1: Position and colour of the LEDs

| LED | Colour | Name | Meaning of LED (LED on) |
|---------|--------|-------|------------------------------------|
| LEDD30A | green | HD | Access to HD-drive |
| LEDD30B | green | CF | Access to CompactFlash card |
| LEDD30C | green | 3.3 V | The 3.3 V supply voltage is active |
| LEDD30D | green | 5.0 V | The 5 V supply voltage is active |

Table 3.1: Display functions of the LEDs

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4. Circuit Diagrams

The PDF-file of this document does not contain the circuit diagrams. The circuit diagrams are shipped on request.