

3-Volt Compatible I²C Communications PCI Adapter PCs



PCI93LVIC

The PCI93LV is able to work with I²C-Bus systems running on supplies between 2 and 6V so is ideally suited for use in low-power 3V applications. The PCI93LV is a PCI-based version of Calibre's well-proven ICA90 I²C-Bus Communications Adapter which is now widely regarded as the industry standard tool and is currently in use by hundreds of companies large and small.

The package supplied includes the PCI card, a comprehensive user manual, Windows 95/98/2000/NT4 and XP device drivers to enable users to integrate the product with their own software applications and a real-time I²C-Bus monitor program.

Ready-to-run WINI2C software for immediate control and development of I²C-Bus systems is also available as an optional extra.

Features:

- True I²C Compatibility***
- I²C-Bus voltage between 2 and 6V (user alterable)***
- True 30/70% logic thresholds track with supply voltage***
- Operates as Master, Slave or Real-Time Monitor***
- Fits any PC with free PCI slot***
- Win95/98/2000/NT4 & XP device drivers and monitor software included***
- I²C Configuration through software***
- I²C Connection via 9 way D socket***
- +2 to 6V power available on I²C connector***

The PCI93LV is based around the Philips PCF854 I²C Bus controller to support the full I²C communications protocol and plugs into any available PCI slot in your PC. Bus termination and protection are all link selectable while I²C configuration and all other protocol functions are software controllable. The I²C-Bus voltage is selectable by a trim-pot accessible through the card mounting bracket.

All I²C features are available under software control including data transmission mode (master/slave, transmitter/receiver), own slave address and SCL clock speed when operating as a master (1.5/11/45/90kHz). A "transparent" real-time bus monitor program is also provided. The PCI93LV fully supports multi-master operation and associated bus arbitration.



Make Your PC I²C Compatible

The PCI93LV adapter adds inexpensive PC computing power to any I²C system and presents an attractive alternative option to the use of a microprocessor or microcontroller. Current applications include development systems, production line test and set-up of I²C based equipment, control of systems and specialised data links between equipment.

Win95/98/2000/NT4 & XP device drivers and a real-time bus monitor program are included with the PCI93LV/C package. Win95/98/2000/NT4 & XP ready to run software applications are available as optional extras. Note: the PCI93LV/C cannot be used under DOS or Win3.1

Standard software is in the form of function libraries for use in users' own application software.

The principle of the software is to provide all the I²C functions - I²C adapter set-up (including card's own I²C slave address and SCL clock speed), Start & slave address transmission, byte transmission, byte reception, Stop transmission and of course access to status information. The user then builds these high-level functions into the necessary program for driving their particular I²C devices. This option was chosen as opposed to providing drivers for specific I²C devices since

there are so many different types and sources available it would be impossible to provide specific code to suit all applications. The software routines provided allow any I²C device, current or future, to be communicated with. It should be noted that all I²C-Bus operations are on a byte-wise basis.

On the disc provided with the PCI93LV/C there is a ready to run real-time bus monitor program which traces all transmissions on an externally mastered I²C bus and records them in an ASCII file on disc. The monitor traces in real-time without affecting the I²C system it is monitoring - to do so the card must be used in a PC which is not running other tasks at that time (such as FindFast, Outlook) otherwise data may be missed. The monitor does not provide a real-time display to the screen, all data is stored on disc. It does carefully post-process the data recorded into easily understood information.

Calibre UK Ltd undertakes I²C-Bus software development and support contracts to customers' own requirements. Calibre also offers a large range of LCD displays and interfaces, colour monitors, computer video distribution amplifiers, scan converters and other display related products. Please call for further information.

Specification	<p>PCI - PC compatible card (fits any PCI slot)</p> <p>Full I²C Compatibility I²C-Bus voltage adjustable between 2 and 6 volts Factory pre-set 3.3V for use with low-voltage devices I²C configuration through software Can be Master/Slave, Transmitter/Receiver, Real-Time Monitor</p> <p>Software device drivers included for Win95/98/2000/NT4 & Windows XP Ready to run Real-Time Monitor included Includes comprehensive User Manual</p> <p>I²C connections via 9 Way D socket I²C-Bus voltage output to power external circuits via 9 Way D</p>
Options	<p>WINI2CPCI ready to run application software, 95/98/2000/NT4 & Windows XP versions available</p>

For further information on the PCI93LV/C or any other Calibre product contact:

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