

## **PICA93LV**

### **Desktop 3-Volt Compatible I2C Communications Adapter**

Ideal for use with a laptop where portability is a prime requirement

**[Click here to view PICA93LV picture](#)**

Calibre's 3-volt I2C Communications Adapter is now available in a desktop format to plug onto the printer port of your PC. The PICA93LV is able to work with I2C-Bus systems running on supplies between 2 and 5V so is ideally suited for use in low-power 3V applications. The PICA93LV is based upon 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 desktop unit, user manual, sample software routines and source code functions in C and QuickBASIC for all I2C-bus operations as well as set-up and status checking routines. 16-bit Windows DLLs are provided for users wishing to write software in either Microsoft C++ or Visual Basic.

#### **Features**

- **100% I2C Compatibility**
- **I2C-Bus voltage between 2 and 5V (user alterable)**
- **True 30/70% logic thresholds track with supply voltage**
- **Operates as Master or Slave**
- **Connects to any PC parallel printer port**
- **Software Function Libraries & User Manual included**
- **I2C Configuration through software**
- **I2C Connection via 9 way D socket**
- **Powered via keyboard or mouse connector**
- **+2 to 5V power available on I2C connector**

PICA93LV supports the full I2C communications protocol and connects to any PC parallel printer port. Power is obtained from any keyboard or PS/2 style mouse connector. All cables for connection to the PC are provided as standard. Based around the Philips PCF 8584 I2C Bus Controller it will work with any IBM compatible computer. Bus termination and protection are 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). PICA93LV fully supports multi-master operation and associated bus arbitration.

## **Make Your PC I2C Compatible**

The PICA93LV 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.

A comprehensive package is supplied including simple software routines in C and QuickBASIC for DOS programmers and as 16-bit DLLs for Microsoft C++ and Visual Basic for Windows programmers, a full user manual for the PICA93LV and the PICA93LV hardware itself. The user manual gives comprehensive software information but does assume that the user is already familiar with the protocol of the I2C bus and programming and on PCs.

The software support 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 - PICA93LV 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 (s). 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 the PICA93LV operations are on a byte-wise basis. The software routines supplied are only for using the adapter in polled mode but will work in interrupt driven mode with minor modifications. Using the PICA93LV as a Slave transmitter is quite specialised and requires a few extra lines of code under DOS. The Windows DLLs are recommended if Slave mode is to be implemented. Calibre technical staff will be pleased to help if you wish to undertake such a use.

On the disc provided with the PICA93LV there are sample programs giving examples of how to use the library functions.

### **Specification**

Desktop cased unit connects via parallel printer port and keyboard or PS/2 mouse ports

Full I2C Compatibility  
I2C-Bus voltage adjustable between 2 and 5 volts  
Factory pre-set 3.3V for use with low-voltage devices  
I2C configuration through software  
Can be Master or Slave, Transmitter or Receiver

Software library functions for DOS and Windows 3.1x  
Includes User Manual

I2C connections via 9 Way D socket  
I2C-Bus voltage output to power external circuits via 9 Way D

**Options** 32-bit Windows DLLs, 95 & NT versions available  
WINI2C ready to run application software, 95/98 & NT4 versions available

**Calibre designs and manufactures its I2C-Bus Communications Adapters at its base in the UK .**

Calibre manufactures and distributes a wide range of high performance colour CRT and flat panel displays, computer video distribution amplifiers and video signal scan converters and radar graphics processing equipment. If you have any requirement for display equipment Calibre's product application specialists are ready to help you reach an effective solution.

**For further information on the I2C-Bus Communications Adapters or any other Calibre product contact:**

**Calibre UK Limited, Cornwall House,  
Cornwall Terrace Bradford, West Yorkshire  
BD8 7JS, England**

**UK Sales Freephone 0800 318242  
Telephone (44) 01274 394125  
Fax (44) 01274 730960  
email [kent@calibreuk.com](mailto:kent@calibreuk.com)**

**In the USA call Saelig Company toll-free on 1-888-7SAELIG, or buy on-line at [www.saelig.com](http://www.saelig.com)**

Issue 2.2 21 Jan 2000 All trademarks acknowledged

***GO BACK TO:***

I2C-BUS COMMUNICATIONS ADAPTERS

Calibre UK Ltd Home Page