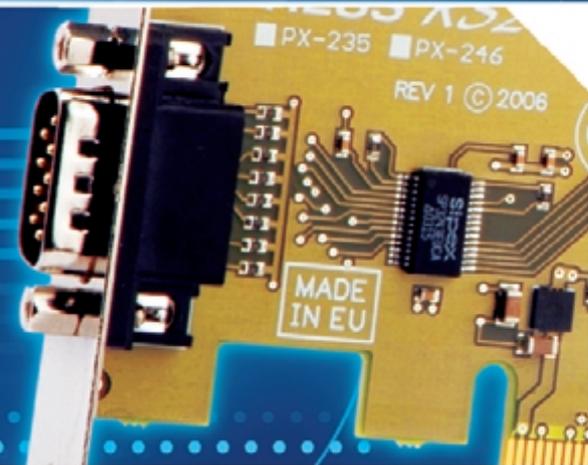


RoHS Compliant

PX-101

PCI EXPRESS LOW PROFILE 1+1 PORT RS232

'PCI EXPRESS CARDS ENGINEERED TO EXCEED EXPECTATIONS'

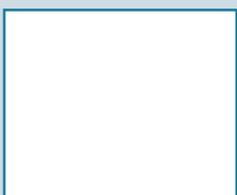


### Features

- 2 Port RS232
- Fits on x1, x4, x8 or x16 PCI Express expansion slot
- 128 Byte FIFOs with user definable trigger level
- 921,600 Baud, true megabaud line drivers
- Standard Profile and Low Profile Option
- Drivers for all popular operating systems
- Sample Programs, Test & Terminal software - all with source code
- Lifetime Support and Lifetime Warranty

[Click on each feature to find similar products](#)

### Options



Low Profile:  
PX-101

### Description

Low Profile PCI Express card provides 1 industry standard 9 pin RS232 serial COM port fits in any PCI Express slot e.g., x1, x4, x8 or x16 lanes.

An additional serial com port is available on the flying lead header using the included male 9 pin 'D' type serial cable.

Now with Brainboxes Lifetime Warranty and Lifetime Support!

### Software

Microsoft signed drivers (easy installation & robust operation) for:

- o Windows Vista
- o Windows Server 2003 x32 bit & x64 bit Editions
- o Windows XP x32 bit & x64 Editions
- o Windows 2000.



As well as: full product documentation, a thorough troubleshooting guide and terminal software. Detailed sample source code for all popular programming languages.

Need support for other operating systems? Please telephone or email. Find out about Brainboxes excellent driver configurability: [Click Here](#)

AWAITING  
PHOTO



### ORDER

#### Description

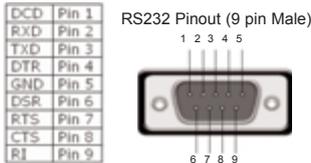
PCI EXPRESS LOW PROFILE 1+1 PORT RS232

#### Code

PX-101

# PCI EXPRESS LOW PROFILE 1+1 PORT RS232

## Full Specification

<b>Product Code</b>	PX-101	
<b>PCI Express</b>		
 <p>RS232 Pinout (9 pin Male)</p>	<b>Ports</b> <b>Connector</b> <b>UART type</b> <b>FIFO size</b> <b>Powered Output</b> <b>Operating Distance</b>	2 Port RS232 DB9 (9 Pin Male) 16950 UART inside Brainboxes LYNX BB16PCI958 128 Byte with user definable trigger level No (for powered output see PCI Express POS range EIA - RS232 Standard
<b>Serial Port Settings</b>		
	<b>Baud Rate (bits per second)</b> <b>Data Bits</b> <b>Parity</b> <b>Stop Bits</b> <b>Flow Control</b> <b>IRQs</b> <b>Connection Schemes</b>	up to 921,600 5,6,7 or 8 Odd, Even, None, Mark or Space 1, 1.5 or 2 CTS/RTS DTR/DSR Plug and Play - Shared interrupts for all ports Point to Point
<b>General</b>		
	<b>Bracket Profile</b> <b>PCB Layers</b> <b>Weight</b> <b>Size</b>	Low Profile (PX-101) 4 0.051 kg 110mm x 70mm x 15mm
<b>Interface</b>		
	<b>BUS Compatibility</b> <b>OS Compatibility</b>  <b>PCI Express Compliance</b>	PCI Express x1, x4, x8 & x16 lane slots Windows 2000/ XP/ Server 2003/Windows XP x64 bit Edition / Windows Server 2003 x64 bit / Windows Vista Linux Version 1.0a
<b>Microsoft Approvals</b>	Windows XP Home, Windows XP Professional	
<b>Approvals &amp; Accreditations</b>		UL, EMC: CE, FCC, PCI Power Management 1.1 Compliant, PCI Express 1.0a
<b>Box Contents</b>	Installation CD including manual, Microsoft signed drivers, utilities and sample programs with source code 1 PORT RS232 Installation Guide	
<b>OEM option</b>	Available for bulk buy OEM	
<b>Product Support</b>	Lifetime Email and Phone Support from fully qualified, friendly staff 40 hours a week	
<b>Warranty</b>	Lifetime	
<b>Made In</b>	 	Manufactured in the UK by Brainboxes Winner 2005 European Electronics Industry Awards "Manufacturer of the Year"
<b>Customisable</b>	Brainboxes operate a "Perfect Fit Custom Design" policy for volume users More Info: <a href="#">CLICK HERE</a>	

# PCI EXPRESS LOW PROFILE 1 + 1 PORT RS232

## Glossary: Product Features Explained

### PCI Express

PCI Express is the successor to PCI and its variants for server - and client - system I/O interconnects. Unlike PCI and PCI-X, which are based on 32 and 64-bit parallel buses, PCI Express uses high speed serial link technology.

PCI Express reflects an industry trend to replace legacy shared parallel buses with high-speed point-to-point serial buses. The new bus technology is expected to allow the PCI Express transmission rates to keep pace with processor and I/O advances during the next decade.

**More info on 'PCI Express' products:** [Click Here](#)

### Low Profile

PCI Express Low-Profile PCI is a new PCI card standard for space-constrained system designs. The new form factors maintain the same electricals, PC signals and software drivers as standard PCI v3.0 expansion cards. They are also mechanically similar; however, Low-Profile PCI is an additional form factor that defines a shorter raw card and new mounting bracket for card retention.

### Microsoft Logo Approval

The majority of Brainboxes products, including this one, have been approved by Microsoft as a fully tested and compatible product with popular Microsoft Operating Systems. For the full list of Brainboxes approved products see the **Microsoft website:** [Click Here](#)

### PCI Compliant

All Brainboxes PCI Express cards are fully PCI Express Base Specification 1.0a compliant, in accordance with the PCI-Special Interest Group (PCI-SIG).

### Large FIFO

FIFO means First In First Out, a FIFO is memory space on the Brainboxes card. A larger FIFO allows more memory space for buffering data, so calls to the computer processor are less frequent. This significantly increases data throughput and improves CPU availability for other applications.

**More info:** [Click Here](#)

### 4 Layer PCB

Printed Circuit Board with 4 layers of circuitry complies with the PCI SIG best practice guideline and ensures a more reliable card. 1 layer is for power and 1 for ground which leads to greater EMC shielding for the signals. This ultimately gives greater signal integrity.

### Surface Mount Components

Most components on a Brainboxes card are placed by a surface mount machine. The surface mount machine allows for highly accurate and fast production of Brainboxes cards. Orders can be met quickly, reliably and with outstanding quality.

### Capacitors

As required by the PCI-SIG all Brainboxes cards have capacitors connected to all the power pins on the PCI connector, near to the connector. This ensures that the electrical power rails on the Brainboxes card stay at the right voltage, regardless of the power demands placed on them. This helps data signals keep their integrity.

# PCI EXPRESS LOW PROFILE 1+1 PORT RS232

## Brainboxes' Service

*"Brainboxes offers free lifetime support for ALL customers."*

We aim to provide industry leading support for our customers. Our highly trained and helpful support engineers sit and work closely with the product designers, developers, and testers to ensure an in-depth knowledge of the products. Support can be found by emailing [support@brainboxes.com](mailto:support@brainboxes.com) or calling: +44 (0)151 220 2500 during UK office hours.

Support website: [www.brainboxes.com/support/index.asp](http://www.brainboxes.com/support/index.asp)



*"Brainboxes' passionately believes in the quality of its manufacturing process and will reflect this by offering a Lifetime Warranty on ALL of its universal serial card range."*



Brainboxes is pleased to be able to extend a new Lifetime Warranty for all universal serial cards products. We have introduced this based on our exceptional manufacturing and design quality and the company ethos of kaizen.

## Brainboxes' Kaizen

*"Brainboxes constantly strives to achieve higher standards for the benefit of customers."*

'Kaizen' is a Japanese term meaning 'continuous improvement'. Kaizen has been implemented throughout Brainboxes, resulting in significant improvements to our products and our customer service, as illustrated by the development of our own custom ASIC "LYNX" and our new lifetime warranty. As part of this ongoing process, in 2004 we embarked on 'Lean' and '6 Sigma' programs which are successfully increasing productivity and efficiency in all areas of the company. **More Info:** [Click Here](#)



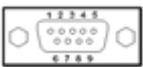
## Brainboxes' LYNX

We developed the Brainboxes LYNX (BB16PCI958) to enable us to drive product performance. By reducing the part count and incorporating several components into one chip (FIFO, UARTs, PCI interface), we have also increased board reliability. The LYNX also features thorough backwards compatibility with legacy systems, tested beyond the databook for compatibility with standard TL16C550, 750 UARTs. The chip is designed so that Brainboxes products will work with all applications designed for TI UARTs. **More Info:** [Click Here](#)

## RS232 Standard

DCD	Pin 1
RXD	Pin 2
TXD	Pin 3
DTR	Pin 4
GND	Pin 5
DSR	Pin 6
RTS	Pin 7
CTS	Pin 8
RI	Pin 9

**RS232 [9 Pin] Pinout**



RS232 is the best known industry standard providing asynchronous serial communication using  $\pm 12$  Volt logic levels over distances up to 100 feet (30 metres). RS232 can be configured to suit all needs from 3 wire communication (using transmit, receive and ground lines only), to more complex hardware and software handshaking. **More info:** [Click Here](#)

TXD	Pin 2
RXD	Pin 3
RTS	Pin 4
CTS	Pin 5
DSR	Pin 6
GND	Pin 7
DCD	Pin 8
DTR	Pin 20
RI	Pin 22

**RS232 [25 Pin] Pinout**

