SB16C1054PCI

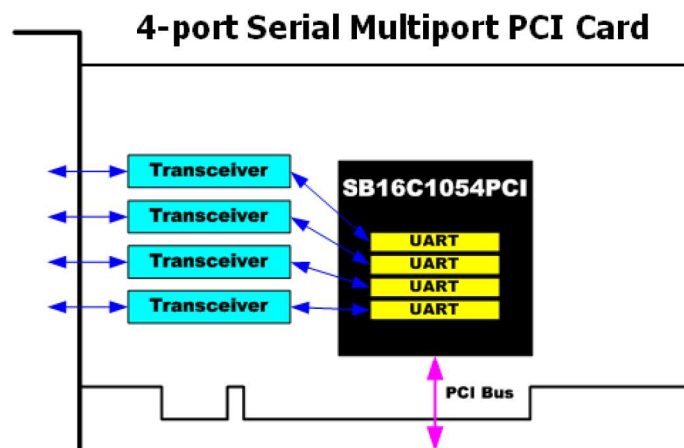## PCI to Quad-UART with 256-Byte FIFO Bridge Controller

SB16C1054PCI is a single chip which enables four asynchronous serial communication ports to be connected to the PCI bus without any glue logic and it's the best solution to constitute a serial port for the PCI bus. It can enable customer to make easy and simple reference design as a one-chip solution for 4-port Serial MultiPort Boards.

It includes SB16C1054, Quad-UART with 256-Byte TX/RX deep FIFO developed by SystemBase. It also has enhanced features, global interrupt and dedicated control pins for RS422/485 auto toggling. The 256-byte FIFOs reduce CPU overhead and allow higher data throughput.

■ SB16C1054PCI Features

– **Standard PCI Local Bus Specification Rev. 2.3 compliant**

– **Built-In PCI Target Controller @ 33/66MHz**

– **Built-In four improved 16C1050 UART with 256-byte Deep FIFO**

– **Zero-Wait PCI Conversion and 24ns UART response time for IOR & IOW**

– **Global Interrupt and Control pins for RS422/485 auto toggling**

■ SB16C1054PCI Block Diagram & Application

4-port Serial Multiport PCI Card

● Features

Integrated PCI Interface

- Standard PCI Local Bus Specification Rev. 2.3 compliant
- Built-In PCI Target Controller
- Adopting Zero-Wait PCI to MIO Bus Conversion
- Supports 33MHz and 66MHz Bus Operation Speed
- Supports Universal PCI working in both PCI and PCI-X slots
- Option Register provided for the control and information of UART
- Downloads the Configuration header data from external serial EEPROM

Quad UART Interface

- Quad-UART with 256-byte Transmit/Receiver Deep FIFOs
- Register Set Compatible with 16C554 and 16C654
- Serial Data Rate of Up to 5.3Mbps & System Clock Up to 85MHz
- Software/Hardware Flow Control & Xoff Re-Transmit Function
- Global Interrupt & Control Pins for RS422/485 Auto Toggling
- Fast UART Response Time, 24ns for IOR & IOW operation
- Internal Diagnostic Capabilities

Support & Order Information

- 3.3V I/O, 5V Tolerance
- LQFP144 Package

SystemBase offers SB16C1054PCI Development Kit to minimize development efforts and costs, and to maximize application stability.

SB16C1054PCI Development Kit includes H/W schematics, CAD files, S/W device driver and source codes and etc. It will help you develop a new product easily and quickly.

Products	Description
SB16C1054PCI	PCI to Quad-UART Bridge Controller
SB16C1054PCI Development Kit	Evaluation Board, Data Sheet, Development Kit Manual, Development Kit CD − E/B Schematics − E/B Artwork & Gerber − Serial EEPROM Data − Device Driver & Test Program − Source Code

SystemBase