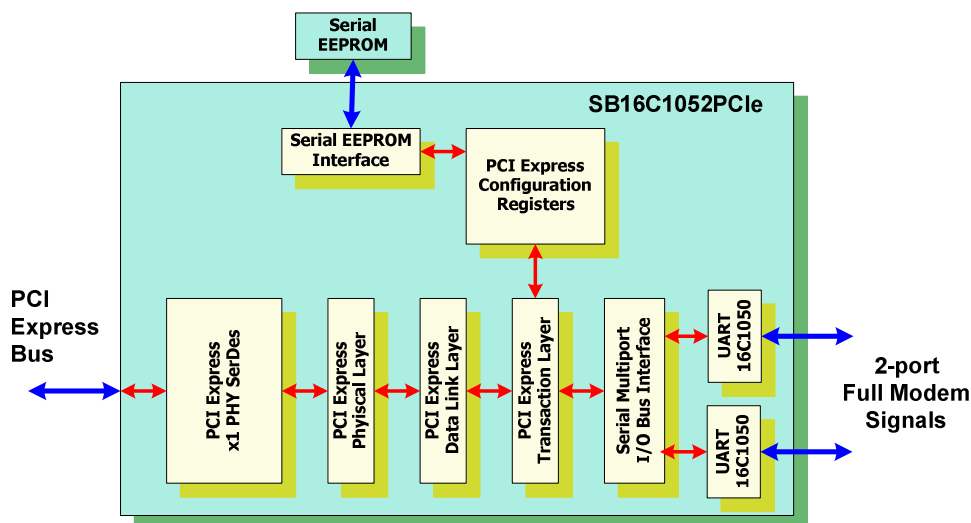# SB16C1052PCIe

RoHS RoHS Compliant

PCI Express to Dual-UART with 256-Byte FIFO Bridge Controller

SB16C1052PCIe, PCI Express to Dual-UART Bridge is a controller which converts the next generation, PCI Express Bus into two set of UART modem signals, or vice versa. It includes a PCI Express X1 PHY chip and SB16C1052, Dual UART with 256-Byte TX/RX FIFO developed by SystemBase. It can be used to develop 1-port or 2-port Serial Multiport Boards

■ SB16C1052PCIe Main Features

- – Standard PCI Express Base Specification v1.0a and v1.1 compliant
- – Built-In PCI Express x1 PHY
- – Includes two improved 16C1050 UART with 256-byte FIFO
- – Global Interrupt & Control pins for RS422/485 auto toggling
- – Full Modem Signals including TX/RX
- – Supports Power Management, Hot-Plug and MSI functions
- – TQFP100, support easy & economy soldering

■ SB16C1052PCIe Block Diagram

● Features

Integrated PCI Express Interface

- Standard PCI Express Base Specification v1.0a and v1.1 compliant
- Built-In PCI Express PHY
- PCI Express single-lane(x1), Compatible with x4, x8, x16 PCI Express slots
- PCI Express 2.5Gbps per direction
- One Virtual Channel
- Supports Power Management (PCI-PM v1.2 & ASPM L0s) & Hot-Plug functions
- Downloads the Configuration header data from external serial EEPROM

Dual UART Interface

- Dual-Channel UART(Universal Asynchronous Receiver and Transmitter)
- 256-byte Transmit/Receiver 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
- Internal Diagnostic Capabilities

Support & Order Information

- TQFP100, support economy soldering for manufacturing & service

SystemBase offers SB16C1052PCIe Development Kit to minimize development efforts and costs, and to maximize application stability.
SB16C1052PCIe 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.
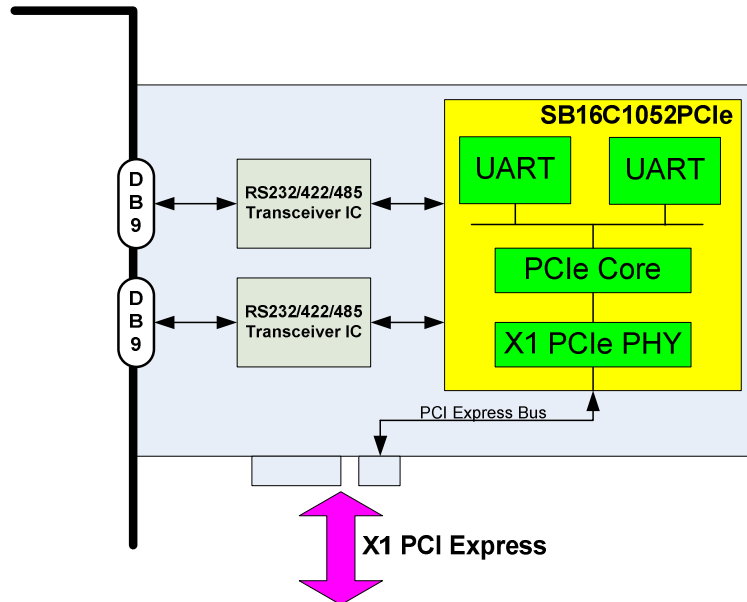
Products	Description
SB16C1052PCIe	PCI Express to Dual−UART Bridge with x1 PHY
SB16C1052PCIe Development Kit	Evaluation Board, Data Sheet, Development Kit Manual, Development Kit CD − E/B Schematics − E/B Artwork & Gerber − Serial EEPROM Data − Device Driver & Test Program − Source Code

SystemBase

● Applications

Serial MultiPort PCI Express Adapter Card, 1~2 Port

Serial MultiPort ExpressCard, 1~2 Port