SB5001, PCI Express to MultiPort I/O Bridge Controller

SB5001





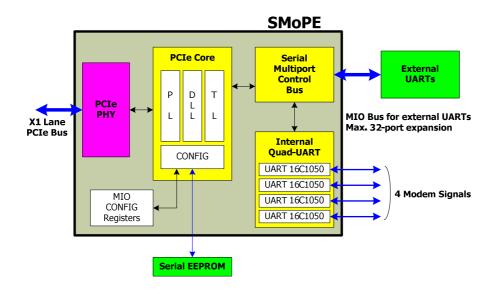
PCI Express to Serial Multiport Bridge with x1 PHY

SB5001 is the Serial Multiport controller which converts the next generation, PCI Express Bus into Multiport I/O Bus signals, or vice versa. It has a PCI Express X1 PHY and operate at a clock speed of 2.5GHz external/ 125MHz internal clock. Users can make the 4 to 32 port Serial Multiport Card using this controller.

■ SB5001 Main Features

- Standard PCI Express Base Specification v1.0a and v1.1 compliant
- Built-In PCI Express x1 PHY
- Built-In Quad-UART with 256-Byte FIFO, SB16C1054
- Supports 4, 8, 16, 24, 32 ports Serial MultiPort
- Supports Power Management, Hot-Plug and MSI functions
- LQFP176, Supports easy & economy soldering

■ SB5001 Block Diagram





SB5001, PCI Express to MultiPort I/O Bridge Controller

Features

Integrated PCI Express Interface

- Standard PCI Express Base Specification v1.0a and v1.1 compliant
- Built-In x1 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
- Supports Message Signaled Interrupt (MSI) & INTx emulation
- Downloads Configuration header data from external serial EEPROM

Local I/O Bus Interface

- Supports New MultiPort I/O Bus by SystemBase
 8-bit data width & 8-bit address width support for Multiport
 8 Chip Selections & 8 Interrupt Requests per Channel
- Built-In Quad UART with 256-byte FIFO, SB16C1054
- Up to 32-port Serial MultiPort PCIe Adapter Card
- Capable of controlling UART Read/Write time

<u>Support & Order Information</u>

- LQFP176, Supports economy soldering for manufacturing & service

SystemBase offers the SB5001 Development Kit to minimize efforts and costs, and to maximize application stability.

SB5001 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.



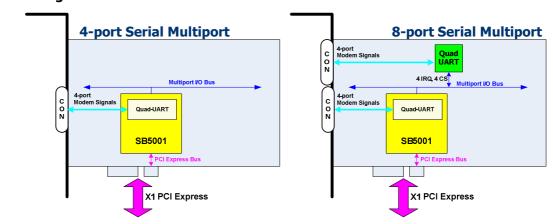
Products	Description
SB5001	PCI Express to Local I/O Bus Bridge with x1 PHY
SB5001 Development Kit	Evaluation Board, Data Sheet, Development Kit Manual, Development Kit CD - E/B Schematics - E/B Artwork & Gerber - Serial EEPROM Data - Device Driver & Test Program - Source Code



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Applications

General Design



32-port MultiPort Design

