SB16C1053APCI PCI to 2 Serial, 1 Parallel with 8-bit MIO Bus Bridge Controller

SB16C1053APCI



PCI to 2S+1P with MIO Bus Bridge Controller

SB16C1053APCI is a single chip which enables two asynchronous serial communication ports and 8bit MIO Bus or one parallel port to be connected to the PCI bus without any glue logic and it's the best solution to constitute a serial, parallel port for the PCI bus. It can enable customer to make easy and simple reference design as a one-chip solution for 1 to 2 Serial, 2 Serial + 1 Parallel, 4 Serial, 6 Serial.

It includes Dual UART with 256-Byte TX/RX deep FIFO and one Parallel Port 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. All IEEE Standard 1284 Protocols Supported (Compatibility, Nibble, Byte, EPP, and ECP)

SB16C1053APCI Features

- Built-In two improved UART with 256-byte FIFO & 9-bit Comm.
- Support Serial Speed up to 921.6Kbps
- Enhanced Auto Toggling for RS422/485 auto toggling
- Built-In one Parallel compatible with IEEE1284 std.
- Support SPP/ Nibble/ Byte/ EPP/ ECP modes of Parallel Port
- Use 3.3V only (Cost Down with removing regulator IC)

SB16C1053APCI Block Diagram & Application



SB16C1053APCI has 6 product models.

- PCI to 1 Serial
- PCI to 2 Serial
- PCI to 4 Serial
- PCI to 6 Serial
- PCI to 1 Parallel
- PCI to 2 Serial + 1 Parallel
- PCI to 2 Serial + MIO BUS (ISA)



SB16C1053APCI

PCI to 2 Serial, 1 Parallel with 8-bit MIO Bus Bridge Controller

Features

Integrated PCI Interface

- Standard PCI Local Bus Specification Rev. 2.3 compliant
- PCI Power Management Specification Rev. 1.2 compliant
- Supports 33MHz and 66MHz Bus Operation Speed
- Applicable to a high speed bus, PCI-X slots
- Downloads the Configuration header data from external serial EEPROM

Dual UART Interface

- Dual-Channel UART(Universal Asynchronous Receiver and Transmitter)
- 256-byte Transmit/Receive FIFO
- Register Set Compatible with 16C550 and 16C650
- Serial Data Rate of Up to 5.3Mbps & System Clock Up to 85MHz
- Software/Hardware Flow Control & Xoff Re-Transmit Function
- Enhanced 9-bit data Communication Supports
- Enhanced Auto Toggling for RS422/485 network

Parallel Port Interface

- IEEE 1284 compliant SPP/Nibble/Byte/EPP/ECP parallel port
- 16-byte FIFO for SPP/ECP mode

Support & Order Information

- Single 3.3V, 5V I/O Tolerance, TQFP128 Package

SystemBase offers SB16C1053APCI Manufacturing Kit to minimize development efforts and costs, and to maximize application stability.

SB16C1053APCI Manufacturing Kit includes H/W schematics, CAD files, Gerber files and S/W device driver and etc. It will help you develop a new product easily and quickly.



Products	Description
SB16C1053APCI	PCI to 2 Serial, 1 Parallel with 8-bit MIO Bus Bridge Controller 128-pin TQFP, RoHS Industrial Grade, -40 to 85°C



