

Serial Communication Experts

SystemBase!



Serial Card

Bus-Based Device Connectivity

PCI Serial Card

- Multi-1/LPCI.....1-1
- Multi-2/PCI..... 1-3
- Multi-2C/LPCI 1-5
- Multi-4/LPCI 1-7
- Multi-4C/LPCI..... 1-9
- Multi-4J/PCI 1-11
- Multi-8/LPCI.....1-13
- Multi-8C/PCI.....1-15
- Multi-32/LPCI 1-17

- Multi-4/LPCle 1-25
- Multi-4C/LPCle 1-27
- Multi-8/LPCle 1-29
- Multi-8C/LPCle1-31
- Multi-32/LPCle..... 1-33

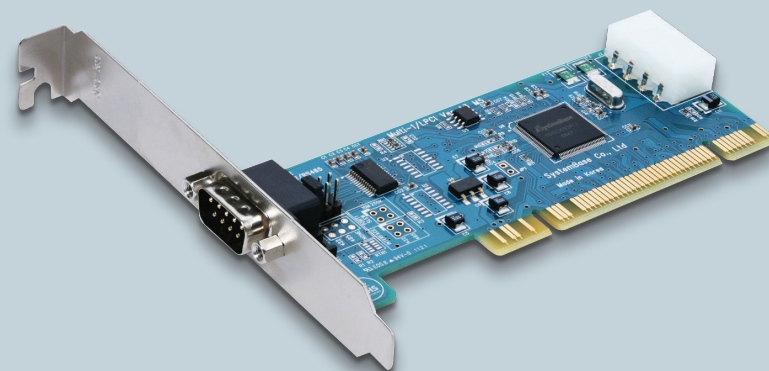
Multi Modem

- Multi-2M/PCI 1-35
- Multi-4M/PCI 1-37
- Multi-4M/PCle..... 1-39

PCI Express Serial Card

- Multi-1/LPCle.....1-19
- Multi-2/PCle1-21
- Multi-2C/LPCle 1-23

Multi-1/LPCI



» Features

- 1 Port Serial Card
- Supports PCI and PCI-X Bus Interface
- RS-232 or RS-422/485(Combo) Interface: 1 port
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Power Supply from pin #9: 5 or 12 V
- Auto Toggling: Automatic control I/O of the Bus for RS-422/485
- Slew-rate Limit Control
- 15KV Surge Protection

Overview

Multi-1/LPCI is equipped with SB16C1052PCI, powerful semiconductor designed by SystemBase. The SB16C1052PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. There are RS232 and RS422/485 (Combo) models. It is ideal for POS, medical use, factory automation and building automation field.

Power Supply through Pin #9

The Multi-1/LPCI is designed to supply 5 or 12 volt power through pin #9 to power the external device. This function is ideal for connecting low power device such as barcode readers or POS printers, eliminating the need for an external power supply.

Auto Toggling

The Multi-1/LPCI has a built-in hardware feature that performs automatic toggling to prevent devices from sending data at the same time causing a crash. This operation is crucial when multiple devices are connected to prevent electrical collisions that lead to errors and unstable communication.

Slew-Rate Limit Control

The Multi-1/LPCI is equipped with Slew Rate limit control for RS422/485 interface and when enabled it minimizes EMI emissions which may cause data transmission errors. When Slew Rate is used maximum communication speed is 250Kbps. This function is recommended in many medical applications.

Specification

Bus Interface

Specification	PCI Local Bus Specification Rev. 2.3
---------------	--------------------------------------

Serial

Interface	RS232, RS422/485 (Combo)
Number of ports	1
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: ±15KV
Flow Control	RTS/CTS, XON/XOFF (by Hardware or Software)
Data Crash Prevention	Auto Toggling (by Hardware or Software)

Hardware

Controller	SB16C1052PCI
Board Connector	DE-09P (DB9 Male)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8 LINUX SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

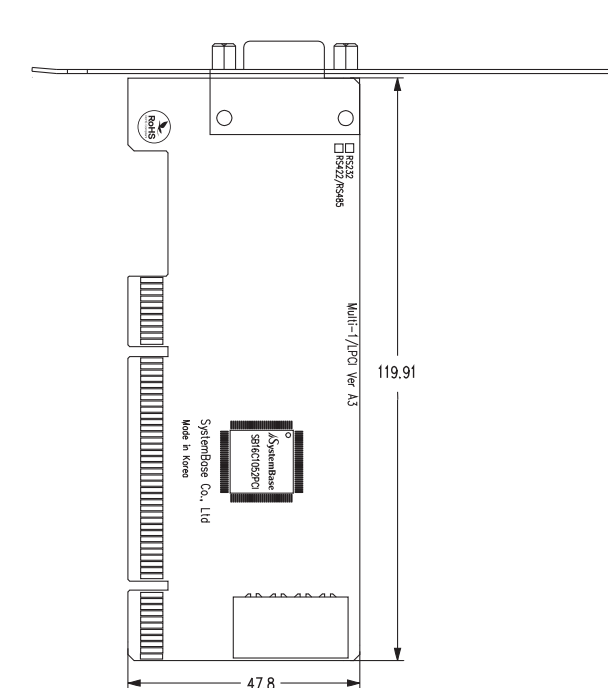
Certifications

KC, CE, FCC

Ordering Information

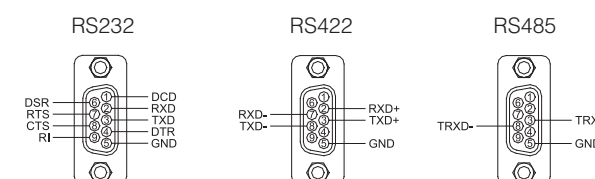
MP-012D9MC/232	Multi-1/LPCI D-sub 9-pin Male RS232 Board, CD(Driver, Manual and Utility)
MP-012D9MC/Combo	Multi-1/LPCI D-sub 9-pin Male Combo (RS422/485) Board, CD (Driver, Manual and Utility)

Dimension

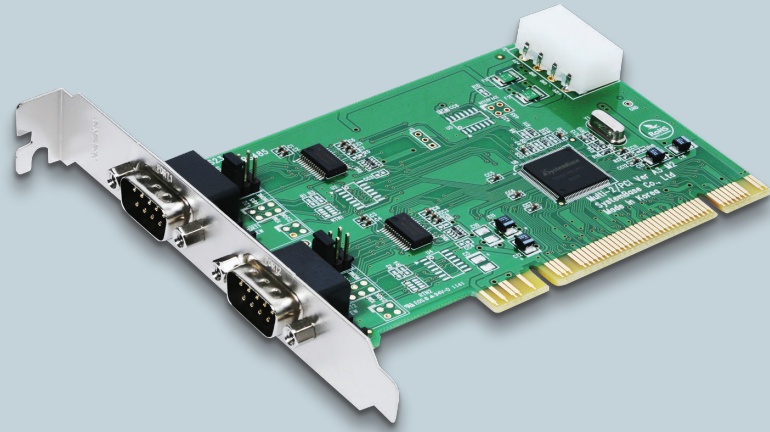


unit : mm

Pin Assignment



Multi-2/PCI



» Features

- 2 Ports Serial Card
- Supports PCI and PCI-X Bus Interface
- RS-232 or RS-422/485(Combo) Interface: 2 ports
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Power Supply from pin #9: 5 or 12 V
- Auto Toggling: Automatic control I/O of the Bus for RS-422/485
- Slew-rate Limit Control
- 15KV Surge Protection

Overview

Multi-2/PCI is equipped with SB16C1052PCI, powerful semiconductor designed by SystemBase. The SB16C1052PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. There are RS232 and RS422/485 (Combo) models. It is ideal for POS, medical use, factory automation and building automation field.

Power Supply through Pin #9

The Multi-2/PCI is designed to supply 5 or 12 volt power through pin #9 to power the external device. This function is ideal for connecting low power device such as barcode readers or POS printers, eliminating the need for an external power supply.

Auto Toggling

The Multi-2/PCI has a built-in hardware feature that performs automatic toggling to prevent devices from sending data at the same time causing a crash. This operation is crucial when multiple devices are connected to prevent electrical collisions that lead to errors and unstable communication.

Opto-Isolation

The Multi-2/PCI ISO version has $\pm 2.5KV$ opto-isolation function. The opto-isolation feature converts electrical signal to optical signal and from optical signal to electrical signal to isolate the electricity in case there are any electrical shock or lightning. It is best used with in the field (subway, factory, and for large motors) where there are possible electrical shocks that the device needed to be secured. The opto-isolation feature is best used to protect the expensive device with lower budget.

Slew-Rate Limit Control

The Multi-2/PCI is equipped with Slew Rate limit control for RS422/485 interface and when enabled it minimizes EMI emissions which may cause data transmission errors. When Slew Rate is used maximum communication speed is 250Kbps. This function is recommended in many medical applications.

Specification

Bus Interface

Specification	PCI Local Bus Specification Rev. 2.3
---------------	--------------------------------------

Serial

Interface	RS232, RS422/485 (Combo)
Number of ports	2
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: $\pm 15KV$
Flow Control	RTS/CTS, XON/XOFF
Data Crash Prevention	Auto Toggling

Hardware

Controller	SB16C1052PCI
Board Connector	DE-09P (DB9 Male)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8
	LINUX
	SCO UNIX
Utility	TestView™

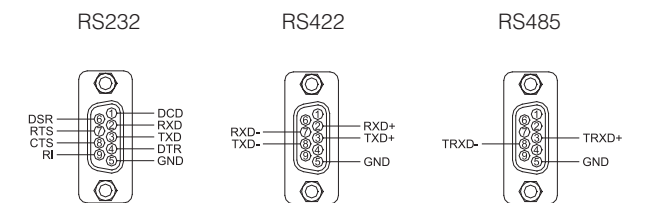
Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

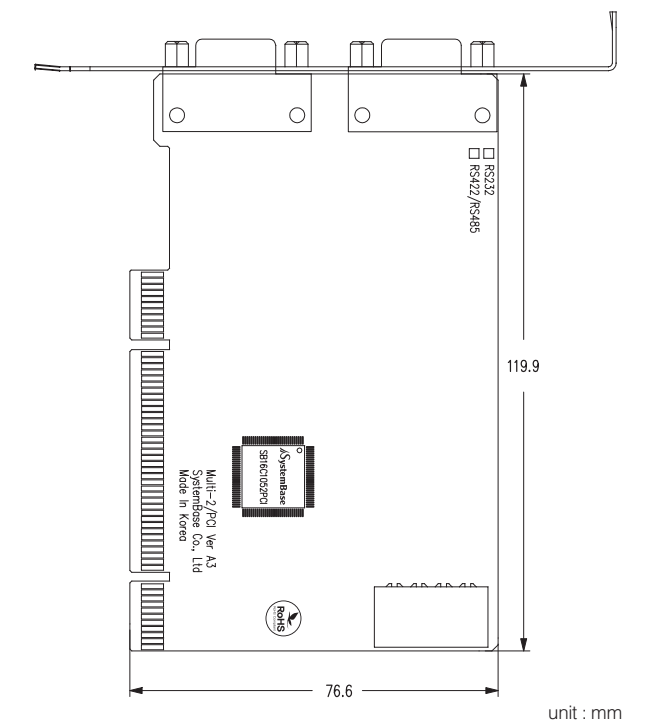
Certifications

KC, CE, FCC

Pin Assignment



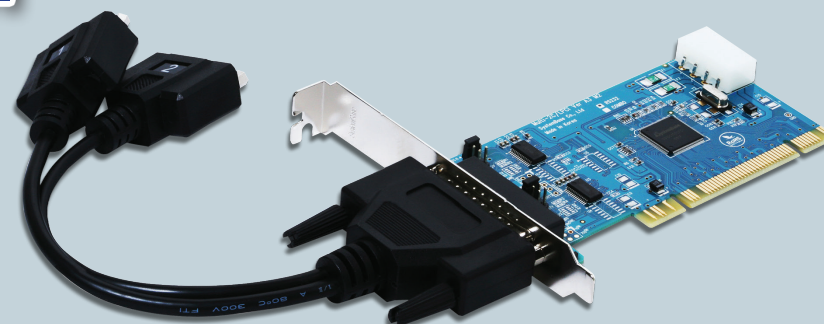
Dimension



Ordering Information

MP-022D9MC/232	Multi-2/PCI D-sub 9-pin Male RS232 Board, CD(Driver, Manual and Utility)
MP-022D9MC/Combo	Multi-2/PCI D-sub 9-pin Male Combo (RS422/485) Board, CD (Driver, Manual and Utility)
MP-022D9MC-ISO/422	Multi-2/PCI D-sub 9-pin Male RS422 Board, CD(Driver, Manual and Utility)
MP-022D9MC-ISO/485	Multi-2/PCI D-sub 9-pin Male RS485 Board, CD(Driver, Manual and Utility)

Multi-2C/LPCI



» Features

- 2 Ports Serial Card
- Supports PCI and PCI-X Bus Interface
- RS-232 or RS-422/485(Combo) Interface: 2 ports
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Power Supply from pin #9: 5 or 12 V
- Auto Toggling: Automatic control I/O of the Bus for RS-422/485
- Slew-rate Limit Control
- 15KV Surge Protection

Overview

Multi-2C/LPCI is equipped with SB16C1052PCI, powerful semiconductor designed by SystemBase. The SB16C1052PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. There are RS232 and RS422/485 (Combo) models. It is ideal for POS, medical use, factory automation and building automation field.

Power Supply through Pin #9

The Multi-2C/LPCI is designed to supply 5 or 12 volt power through pin #9 to power the external device. This function is ideal for connecting low power device such as barcode readers or POS printers, eliminating the need for an external power supply.

Auto Toggling

The Multi-2C/LPCI has a built-in hardware feature that performs automatic toggling to prevent devices from sending data at the same time causing a crash. This operation is crucial when multiple devices are connected to prevent electrical collisions that lead to errors and unstable communication.

Slew-Rate Limit Control

The Multi-2C/LPCI is equipped with Slew Rate limit control for RS422/485 interface and when enabled it minimizes EMI emissions which may cause data transmission errors. When Slew Rate is used maximum communication speed is 250Kbps. This function is recommended in many medical applications.

Specification

Bus Interface

Specification	PCI Local Bus Specification Rev. 2.3
---------------	--------------------------------------

Serial

Interface	RS232, RS422/485 (Combo)
Number of ports	2
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: ±15KV
Flow Control	RTS/CTS, XON/XOFF (by Hardware or Software)
Data Crash Prevention	Auto Toggling (by Hardware or Software)

Hardware

Controller	SB16C1052PCI
Board Connector	DB25 (Male)
Cable	DB25 (Male) to DE-09P (DB9 Male)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8 LINUX SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

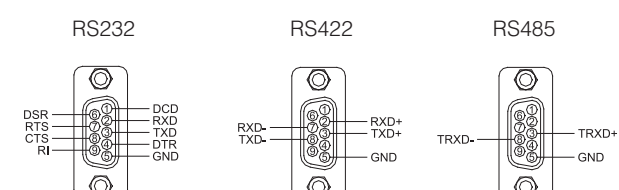
Certifications

KC, CE, FCC

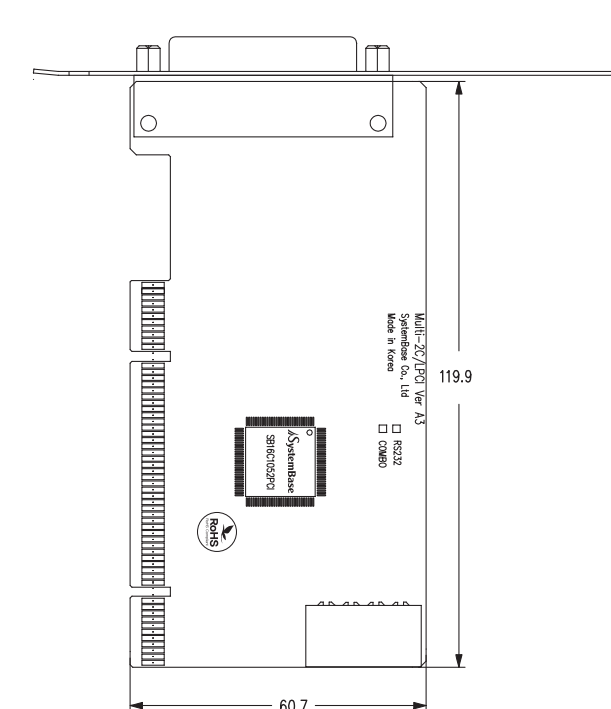
Ordering Information

MP-022CD9MC/232	Multi-2C/LPCI D-sub 9-pin Male RS232 Board, CD(Driver, Manual and Utility)
MP-022CD9MC/Combo	Multi-2C/LPCI D-sub 9-pin Male Combo (RS422/485) Board, CD (Driver, Manual and Utility)

Pin Assignment



Dimension



unit : mm

Multi-4/LPCI



» Features

- 4 Ports Serial Card
- Supports PCI and PCI-X Bus Interface
- RS-232 or RS-422/485(Combo) Interface: 4 ports
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Auto Toggling: Automatic control I/O of the Bus for RS-422/485
- Slew-rate Limit Control
- 15KV Surge Protection

Overview

Multi-4/LPCI is equipped with SB16C1054PCI, powerful semiconductor designed by SystemBase. The SB16C1054PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. There are RS232 and RS422/485 (Combo) models. It is ideal for POS, medical use, factory automation and building automation field.

Auto Toggling

The Multi-4/LPCI has a built-in hardware feature that performs automatic toggling to prevent devices from sending data at the same time causing a crash. This operation is crucial when multiple devices are connected to prevent electrical collisions that lead to errors and unstable communication.

Slew-Rate Limit Control

The Multi-4/LPCI is equipped with Slew Rate limit control for RS422/485 interface and when enabled it minimizes EMI emissions which may cause data transmission errors. When Slew Rate is used maximum communication speed is 250Kbps. This function is recommended in many medical applications.

Specification

Bus Interface

Specification	PCI Local Bus Specification Rev. 2.3
---------------	--------------------------------------

Serial

Interface	RS232, RS422/485 (Combo)
Number of ports	4
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: ±15KV
Flow Control	RTS/CTS, XON/XOFF (by Hardware or Software)
Data Crash Prevention	Auto Toggling (by Software)

Hardware

Controller	SB16C1054PCI
Board Connector	DB44 (Male)
Panel Connector	DE-09S (DB9 Female)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8 LINUX SCO UNIX
Utility	TestView

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

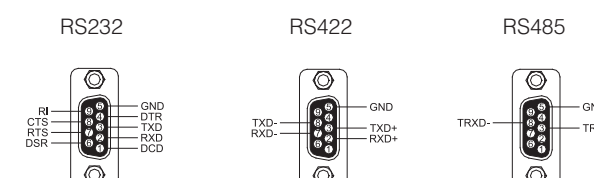
Certifications

KC, CE, FCC

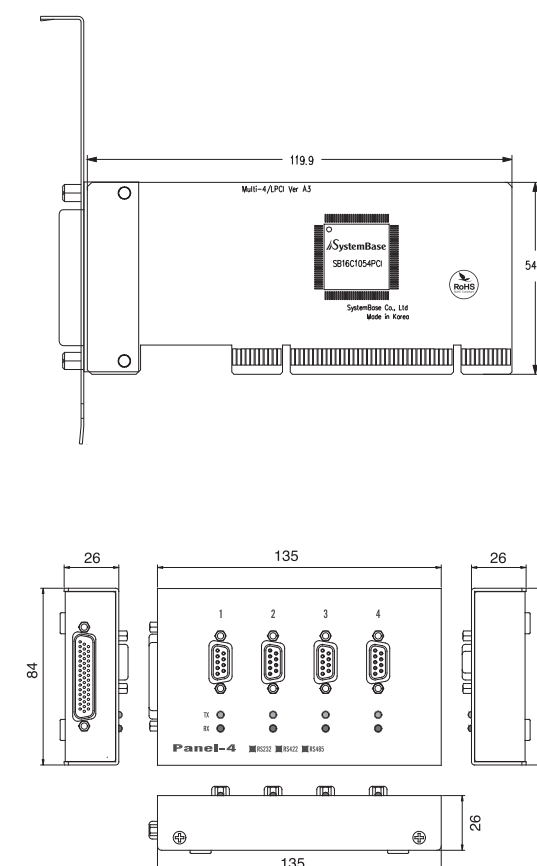
Ordering Information

MP-042PD9FC/232	Multi-4/LPCI D-sub 9-pin Female RS232 Board, CD(Driver, Manual and Utility)
MP-042PD9FC/Combo	Multi-4/LPCI D-sub 9-pin Female Combo (RS422/485) Board, CD (Driver, Manual and Utility)
PN-04/232	Panel-4 RS232
PN-04/Combo	Panel-4 Combo (RS422/485)

Pin Assignment

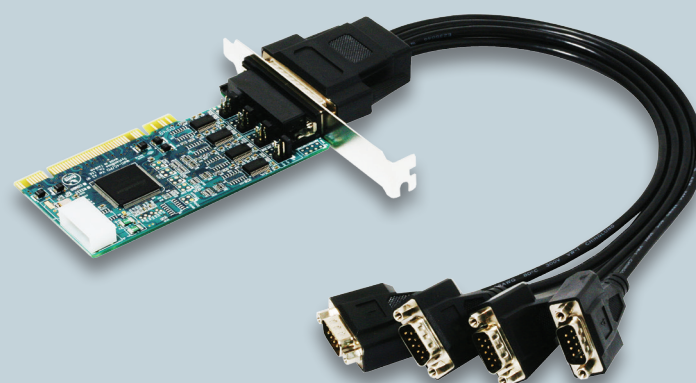


Dimension



unit : mm

Multi-4C/LPCI



» Features

- 4 Ports Serial Card
- Supports PCI and PCI-X Bus Interface
- RS-232 or RS-422/485(Combo) Interface: 4 ports
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Power Supply from pin #9: 5 or 12 V
- Auto Toggling: Automatic control I/O of the Bus for RS-422/485
- Slew-rate Limit Control
- 15KV Surge Protection

Overview

Multi-4C/LPCI is equipped with SB16C1054PCI, powerful semiconductor designed by SystemBase. The SB16C1054PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. There are RS232 and RS422/485 (Combo) models. It is ideal for POS, medical use, factory automation and building automation field.

Power Supply through Pin #9

The Multi-4C/LPCI is designed to supply 5 or 12 volt power through pin #9 to power the external device. This function is ideal for connecting low power device such as barcode readers or POS printers, eliminating the need for an external power supply.

Auto Toggling

The Multi-4C/LPCI has a built-in hardware feature that performs automatic toggling to prevent devices from sending data at the same time causing a crash. This operation is crucial when multiple devices are connected to prevent electrical collisions that lead to errors and unstable communication.

Slew-Rate Limit Control

The Multi-4C/LPCI is equipped with Slew Rate limit control for RS422/485 interface and when enabled it minimizes EMI emissions which may cause data transmission errors. When Slew Rate is used maximum communication speed is 250Kbps. This function is recommended in many medical applications.

Specification

Bus Interface

Specification	PCI Local Bus Specification Rev. 2.3
---------------	--------------------------------------

Serial

Interface	RS232, RS422/485 (Combo)
Number of ports	4
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: $\pm 15KV$
Flow Control	RTS/CTS, XON/XOFF (by Hardware or Software)
Data Crash Prevention	Auto Toggling (by Hardware or Software)

Hardware

Controller	SB16C1054PCI
Board Connector	DB44 (Female)
Cable	DB44 (Male) to DE-09P (DB9 Male)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8 LINUX SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

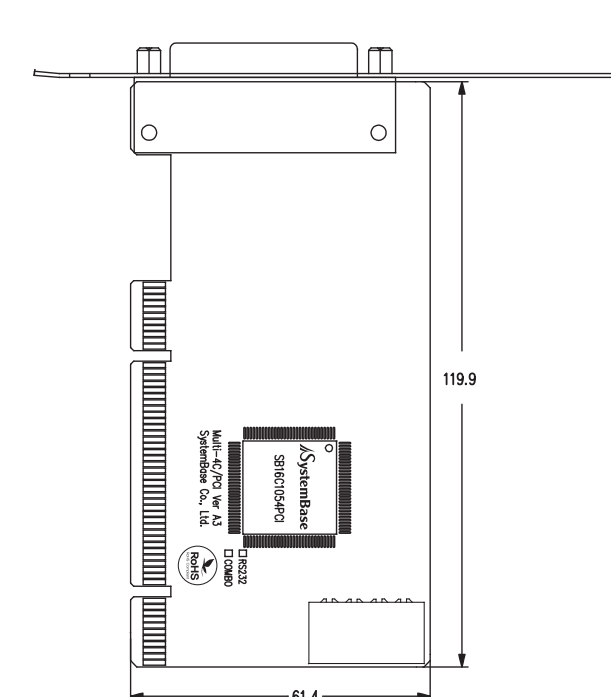
Certifications

KC, CE, FCC

Ordering Information

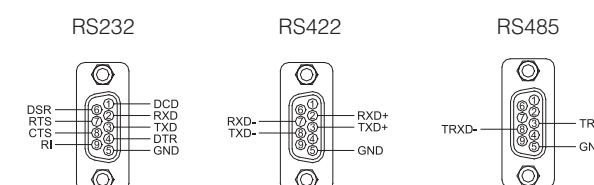
MP-042CD9MC/232	Multi-4C/LPCI D-sub 9-pin Male RS232 Board, CD(Driver, Manual and Utility)
MP-042CD9MC/Combo	Multi-4C/LPCI D-sub 9-pin Male Combo (RS422/485) Board, CD (Driver, Manual and Utility)

Dimension

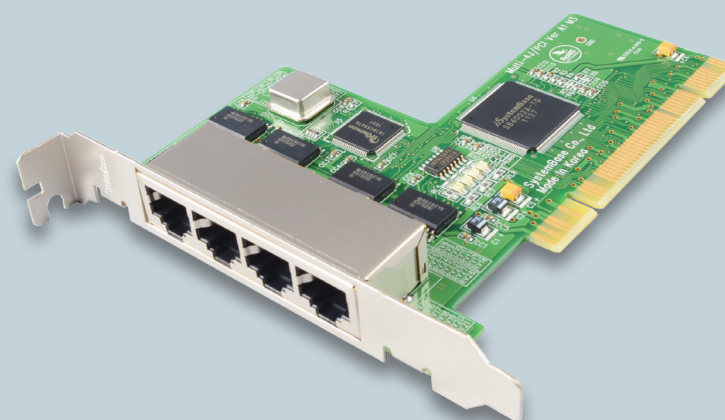


unit : mm

Pin Assignment



Multi-4J/PCI



» Features

- 4 Ports Serial Card
- Supports PCI and PCI-X Bus Interface
- RS-232 Interface: 4 ports
- 16 byte Standard FIFO Size
- Maximum Communication Speed: 230.4Kbps
- Easy to Connect with devices with RJ-45 Connector

Overview

Multi-4J/PCI is equipped with SB4002A and SB16C554A, a semiconductor designed by SystemBase. The SB16C554A semiconductor is a general purpose UART with 16 byte standard size transmit/receive FIFO with nice compatibility. It supports RS232 communication interface only and is ideal for POS, medical use, factory automation and building automation field.

Developed with Special Order

The Multi-4J/PCI is developed with special order by our customer. To minimize the budget, communication speed, surge protection function were limited. The connector is designed for RJ-45 modular jack. This product is available for sales since our customer did not limit the sales only to their company. It uses the 5V or 12V power from the PC and send the signal to legacy RS-232 devices that the compatibility is high with old RS-232 devices. Using RJ-45 connectors allows thinner size of the brackets that fits into the back of the PC. General Ethernet or UTP cable can be used enabling easy to mount and remove from the ports. The maximum communication speed is supported up to 230.4Kbps, but surge protection feature is not included like other products by SystemBase.

Specification

Bus Interface

Specification	PCI Local Bus Specification Rev. 2.3
---------------	--------------------------------------

Serial

Interface	RS232
Number of ports	4
Maximum Speed	230.4 Kbps
Signal Lines	TXD, RXD, DTR, DSR, RTS, CTS, DCD
Flow Control	RTS/CTS, XON/XOFF (by Software)

Hardware

PCI Bus Controller	SB4002A
UART	SB16C554A
Board Connector	RJ45

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8
	LINUX
	SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

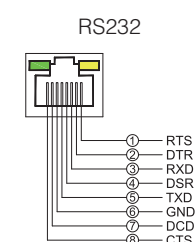
Certifications

KC, CE, FCC

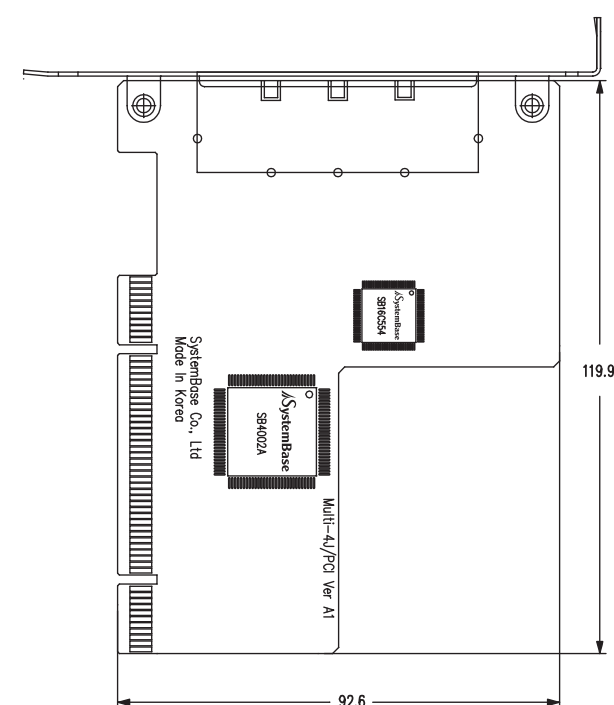
Ordering Information

MP-042RC/232	Multi-4J/PCI RS232 Board, CD(Driver, Manual and Utility)
--------------	--

Pin Assignment



Dimension



unit : mm

Multi-8/LPCI



» Features

- 8 Ports Serial Card
- Supports PCI and PCI-X Bus Interface
- RS-232 or RS-422/485(Combo) Interface: 8 ports
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Auto Toggling: Automatic control I/O of the Bus for RS-422/485
- Slew-rate Limit Control
- 15KV Surge Protection

Overview

Multi-8/LPCI is equipped with SB16C1058PCI, powerful semiconductor designed by SystemBase. The SB16C1058PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. There are RS232 and RS422/485 (Combo) models. It is ideal for POS, medical use, factory automation and building automation field.

Auto Toggling

The Multi-8/LPCI has a built-in hardware feature that performs automatic toggling to prevent devices from sending data at the same time causing a crash. This operation is crucial when multiple devices are connected to prevent electrical collisions that lead to errors and unstable communication.

Slew-Rate Limit Control

The Multi-8/LPCI is equipped with Slew Rate limit control for RS422/485 interface and when enabled it minimizes EMI emissions which may cause data transmission errors. When Slew Rate is used maximum communication speed is 250Kbps. This function is recommended in many medical applications.

Specification

Bus Interface

Specification	PCI Local Bus Specification Rev. 2.3
---------------	--------------------------------------

Serial

Interface	RS232, RS422/485 (Combo)
Number of ports	8
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: ±15KV
Flow Control	RTS/CTS, XON/XOFF (by Hardware or Software)
Data Crash Prevention	Auto Toggling (by Software)

Hardware

Controller	SB16C1058PCI
Board Connector	DB44 (Female)
Panel Connector	DE-09S (DB9 Female)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8 LINUX SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

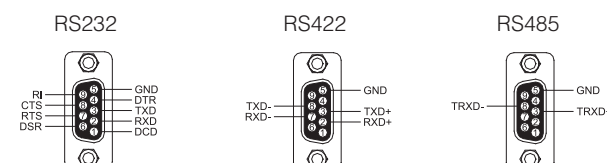
Certifications

KC, CE, FCC

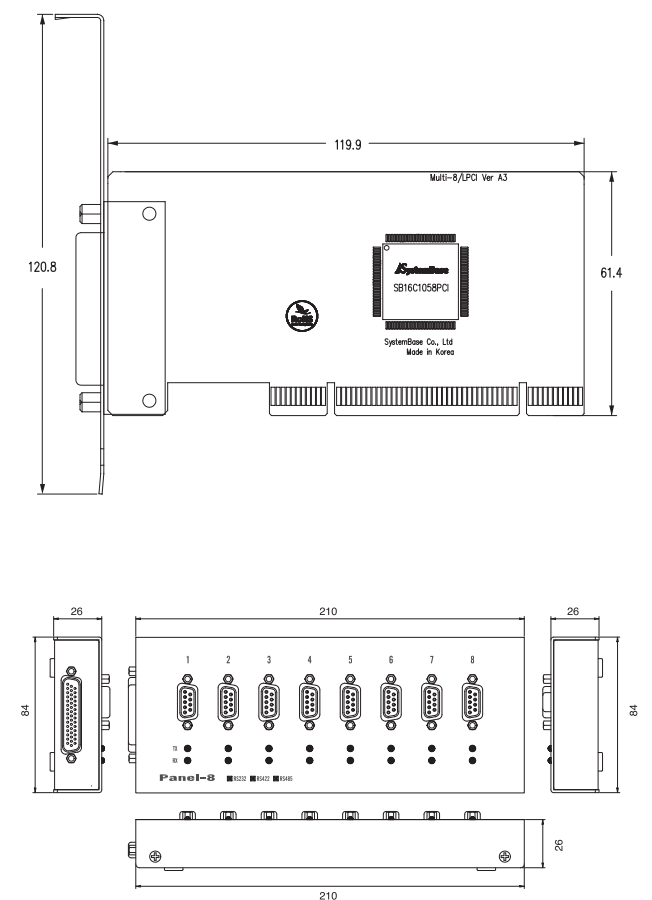
Ordering Information

MP-082PD9FC/232	Multi-8/LPCI D-sub 9-pin Female RS232 Board, CD(Driver, Manual and Utility)
MP-082PD9FC/Combo	Multi-8/LPCI D-sub 9-pin Female Combo (RS422/485) Board, CD (Driver, Manual and Utility)
PN-08/232	Panel-8 RS232
PN-08/Combo	Panel-8 Combo (RS422/485)

Pin Assignment

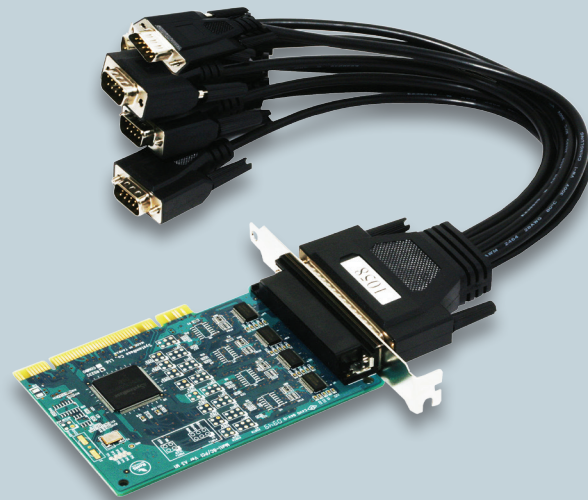


Dimension



unit : mm

Multi-8C/PCI



» Features

- 8 Ports Serial Card
- Supports PCI and PCI-X Bus Interface
- RS-232 or RS-422/485(Combo) Interface: 8 ports
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Auto Toggling: Automatic control I/O of the Bus for RS-422/485
- Slew-rate Limit Control
- 15KV Surge Protection

Overview

Multi-8C/PCI is equipped with SB16C1058PCI, powerful semiconductor designed by SystemBase. The SB16C1058PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. There are RS232 and RS422/485 (Combo) models. It is ideal for POS, medical use, factory automation and building automation field.

Auto Toggling

The Multi-8C/PCI has a built-in hardware feature that performs automatic toggling to prevent devices from sending data at the same time causing a crash. This operation is crucial when multiple devices are connected to prevent electrical collisions that lead to errors and unstable communication.

Slew-Rate Limit Control

The Multi-8C/PCI is equipped with Slew Rate limit control for RS422/485 interface and when enabled it minimizes EMI emissions which may cause data transmission errors. When Slew Rate is used maximum communication speed is 250Kbps. This function is recommended in many medical applications.

Specification

Bus Interface

Specification	PCI Local Bus Specification Rev. 2.3
---------------	--------------------------------------

Serial

Interface	RS232, RS422/485 (Combo)
Number of ports	8
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: $\pm 15KV$
Flow Control	RTS/CTS, XON/XOFF (by Hardware or Software)
Data Crash Prevention	Auto Toggling (by Hardware or Software)

Hardware

Controller	SB16C1058PCI
Board Connector	DC62 (Female)
Cable	DC62 (Male) to DE-09P (DB9 Male)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8 LINUX SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

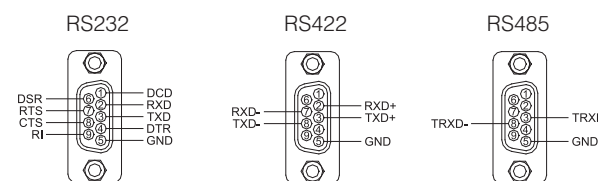
Certifications

KC, CE, FCC

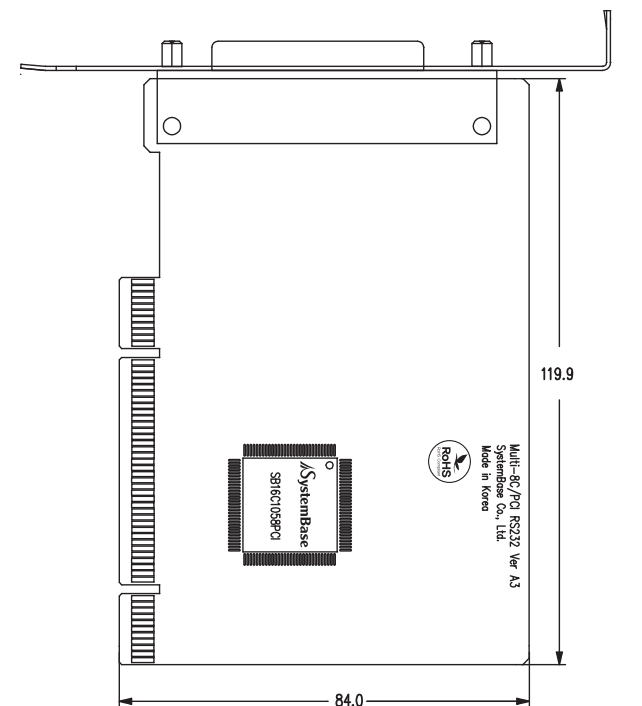
Ordering Information

MP-082CD9MC/232	Multi-8C/LPCI D-sub 9-pin Male RS232 Board, CD(Driver, Manual and Utility)
MP-082CD9MC/Combo	Multi-8C/LPCI D-sub 9-pin Male Combo (RS422/485) Board, CD (Driver, Manual and Utility)

Pin Assignment



Dimension



unit : mm

Multi-32/LPCI



Features

- Serial Card (Supports 32 Ports) with Expandable by 8 Ports Panel
- Supports PCI and PCI-X Bus Interface
- RS-232 or RS-422/485(Combo) Interface: 32 ports
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Power Supply from pin #9: 5 or 12 V
- Auto Toggling: Automatic control I/O of the Bus for RS-422/485
- Slew-rate Limit Control
- 15KV Surge Protection

Overview

Multi-32/LPCI supports total 32 ports used with panels that can be expanded by 8 ports. It is equipped with SB4002A and SB16C1058PCI, powerful semiconductor designed by SystemBase. The SB16C1058PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. There are RS232 and RS422/485 (Combo) models. It is ideal for POS, medical use, factory automation and building automation field.

Power Supply through Pin #9

The Multi-32/LPCI is designed to supply 5 or 12 volt power through pin #9 to power the external device. This function is ideal for connecting low power device such as barcode readers or POS printers, eliminating the need for an external power supply.

Auto Toggling

The Multi-32/LPCI has a built-in hardware feature that performs automatic toggling to prevent devices from sending data at the same time causing a crash. This operation is crucial when multiple devices are connected to prevent electrical collisions that lead to errors and unstable communication.

Slew-Rate Limit Control

The Multi-32/LPCI is equipped with Slew Rate limit control for RS422/485 interface and when enabled it minimizes EMI emissions which may cause data transmission errors. When Slew Rate is used maximum communication speed is 250Kbps. This function is recommended in many medical applications.

Specification

Bus Interface

Specification	PCI Local Bus Specification Rev. 2.3
---------------	--------------------------------------

Serial

Interface	RS232, RS422/485 (Combo)
Number of ports	32 (using four 8-port Panels)
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: ±15KV
Flow Control	RTS/CTS, XON/XOFF (by Hardware or Software)
Data Crash Prevention	Auto Toggling (by Hardware or Software)

Hardware

PCI Bus Controller	SB4002A
UART	SB16C1058
Board Connector	DB44 (Male)
Panel Connector	DE-09P or DE-09S (Male or Female depending on the Panels)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8 LINUX SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

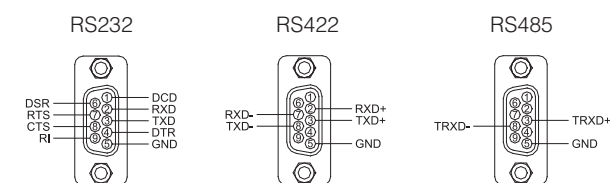
Certifications

KC, CE, FCC

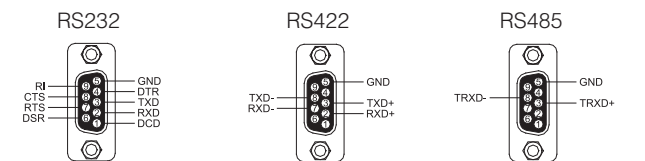
Ordering Information

MP-322PD9C/232	Multi-8/LPCI D-sub 9-pin RS232 Board, CD(Driver, Manual and Utility)
MP-322PD9C/Combo	Multi-8/LPCI D-sub 9-pin Combo (RS422/485) Board, CD (Driver, Manual and Utility)
PN-8ED9M/232	Panel-8e Male RS232
PN-8ED9F/232	Panel-8e Female RS232
PN-8ED9M/Combo	Panel-8e Male Combo (RS422/485)
PN-8ED9F/Combo	Panel-8e Female Combo (RS422/485)

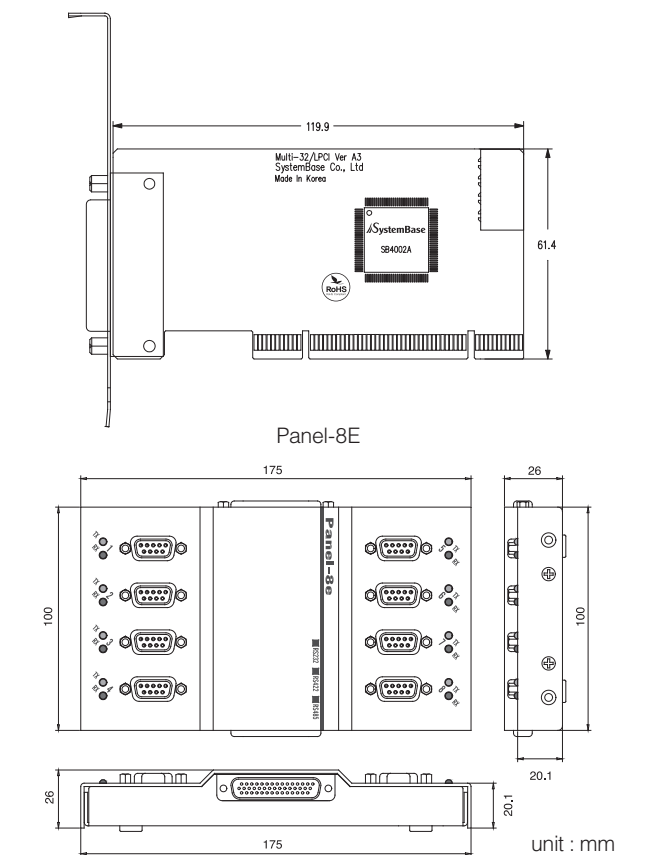
Pin Assignment (DE9 Male)



Pin Assignment (DE9 Female)

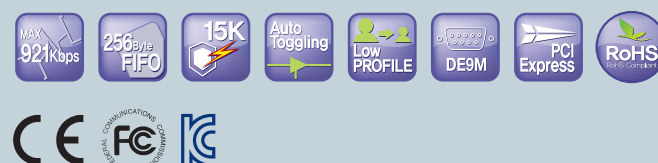
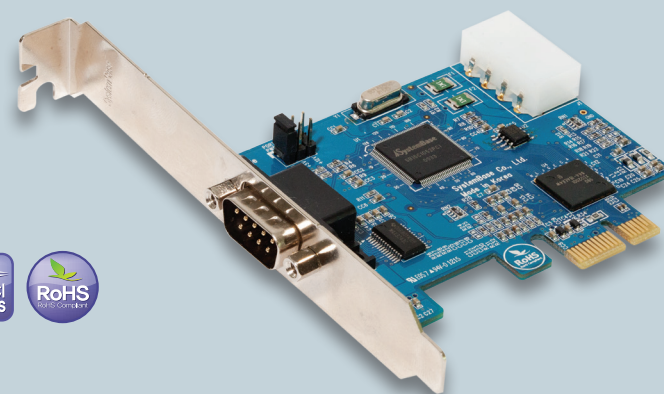


Dimension



Sales : marketing@sysbas.com
 Technical Support : www.solvlne.com

Multi-1/LPCle



» Features

- 1 Port Serial Card
- Supports PCI Express Base Specification Rev. 2.0
- RS-232 or RS-422/485(Combo) Interface: 1 port
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Power Supply from pin #9: 5 or 12 V
- Auto Toggling: Automatic control I/O of the Bus for RS-422/485
- Slew-rate Limit Control
- 15KV Surge Protection

Overview

Multi-1/LPCle is equipped with PCIe to PCI Bridge and SB16C1052PCI, powerful semiconductor designed by SystemBase. The SB16C1052PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. There are RS232 and RS422/485 (Combo) models. It is ideal for POS, medical use, factory automation and building automation field.

Power Supply through Pin #9

The Multi-1/LPCle is designed to supply 5 or 12 volt power through pin #9 to power the external device. This function is ideal for connecting low power device such as barcode readers or POS printers, eliminating the need for an external power supply.

Auto Toggling

The Multi-1/LPCle has a built-in hardware feature that performs automatic toggling to prevent devices from sending data at the same time causing a crash. This operation is crucial when multiple devices are connected to prevent electrical collisions that lead to errors and unstable communication.

Slew-Rate Limit Control

The Multi-1/LPCle is equipped with Slew Rate limit control for RS422/485 interface and when enabled it minimizes EMI emissions which may cause data transmission errors. When Slew Rate is used maximum communication speed is 250Kbps. This function is recommended in many medical applications.

Specification

Bus Interface

Specification	PCI Express Base Specification Rev. 2.0
---------------	---

Serial

Interface	RS232, RS422/485 (Combo)
Number of ports	1
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: ±15KV
Flow Control	RTS/CTS, XON/XOFF (by Hardware or Software)
Data Crash Prevention	Auto Toggling (by Hardware or Software)

Hardware

Controller	SB16C1052PCI
Board Connector	DE-09P (DB9 Male)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8 LINUX SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

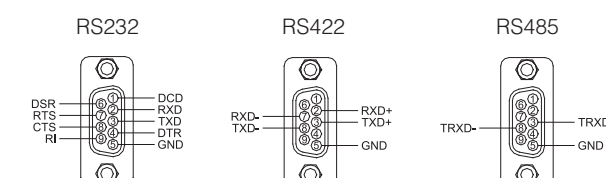
Certifications

KC, CE, FCC

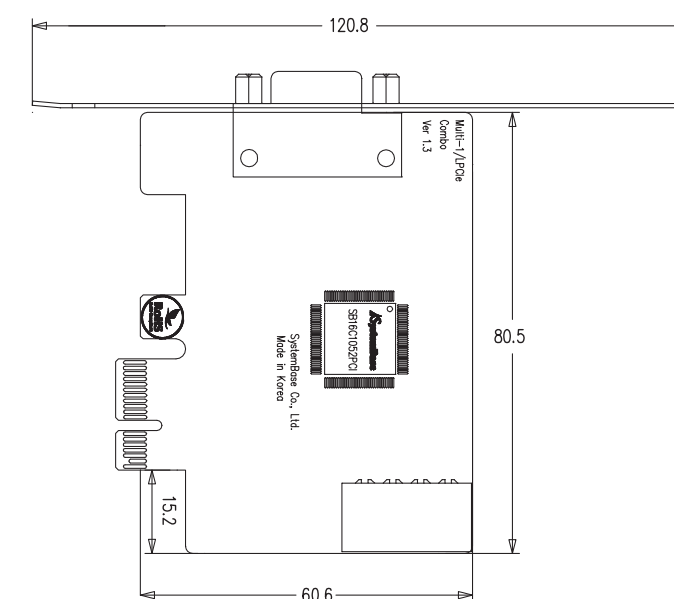
Ordering Information

MP-013D9MC/232	Multi-1/LPCle D-sub 9-pin Male RS232 Board, CD(Driver, Manual and Utility)
MP-013D9MC/Combo	Multi-1/LPCle D-sub 9-pin Male Combo (RS422/485) Board, CD (Driver, Manual and Utility)

Pin Assignment

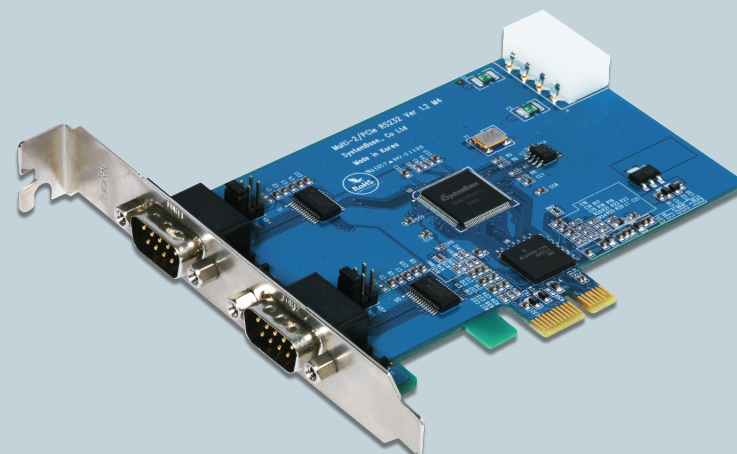


Dimension



unit : mm

Multi-2/PCIe



» Features

- 2 Ports Serial Card
- Supports PCI Express Base Specification Rev. 2.0
- RS-232 Interface: 2 ports
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Power Supply from pin #9: 5 or 12 V
- 15KV Surge Protection

Overview

Multi-2/PCIe is equipped with PCIe to PCI Bridge and SB16C1052PCI, powerful semiconductor designed by SystemBase. The SB16C1052PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. It is ideal for POS, medical use, factory automation and building automation field.

Power Supply through Pin #9

The Multi-2/PCIe is designed to supply 5 or 12 volt power through pin #9 to power the external device. This function is ideal for connecting low power device such as barcode readers or POS printers, eliminating the need for an external power supply.

Specification

Bus Interface

Specification	PCI Express Base Specification Rev. 2.0
---------------	---

Serial

Interface	RS232
Number of ports	2
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: ±15KV
Flow Control	RTS/CTS, XON/XOFF (by Hardware or Software)

Hardware

Controller	SB16C1052PCI
Board Connector	DE-09P (DB9 Male)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8 LINUX SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

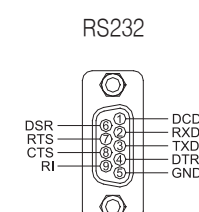
Certifications

KC, CE, FCC

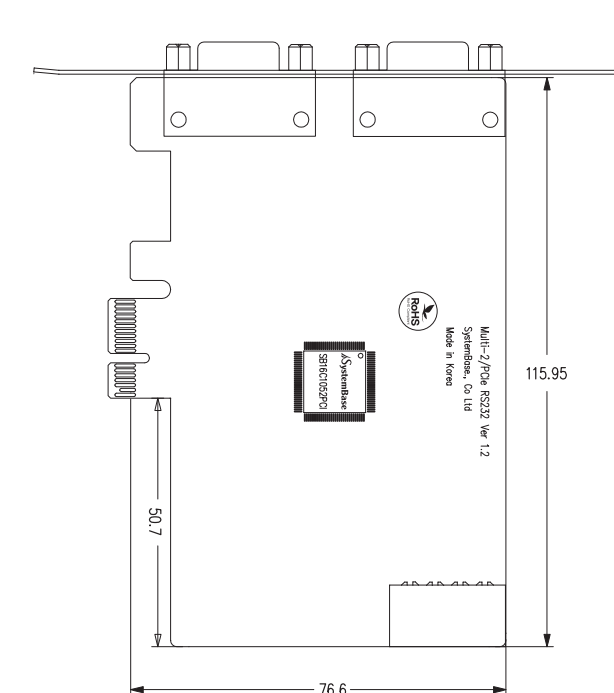
Ordering Information

MP-023D9MC/232	Multi-2/PCIe D-sub 9-pin Male RS232 Board, CD(Driver, Manual and Utility)
----------------	---

Pin Assignment

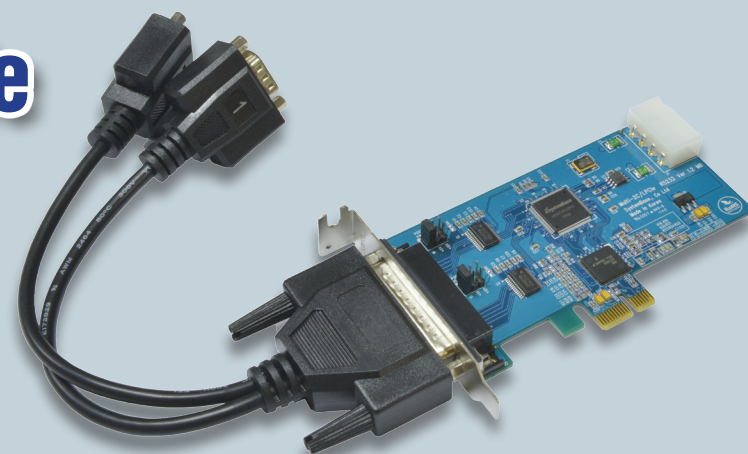


Dimension



unit : mm

Multi-2C/LPCle



» Features

- 2 Ports Serial Card
- Supports PCI Express Base Specification Rev. 2.0
- RS-232 or RS-422/485(Combo) Interface: 2 ports
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Power Supply from pin #9: 5 or 12 V
- Auto Toggling: Automatic control I/O of the Bus for RS-422/485
- Slew-rate Limit Control
- 15KV Surge Protection

Overview

Multi-2C/LPCle is equipped with PCIe to PCI Bridge and SB16C1052PCI, powerful semiconductor designed by SystemBase. The SB16C1052PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. There are RS232 and RS422/485 (Combo) models. It is ideal for POS, medical use, factory automation and building automation field.

Power Supply through Pin #9

The Multi-2C/LPCle is designed to supply 5 or 12 volt power through pin #9 to power the external device. This function is ideal for connecting low power device such as barcode readers or POS printers, eliminating the need for an external power supply.

Auto Toggling

The Multi-2C/LPCle has a built-in hardware feature that performs automatic toggling to prevent devices from sending data at the same time causing a crash. This operation is crucial when multiple devices are connected to prevent electrical collisions that lead to errors and unstable communication.

Slew-Rate Limit Control

The Multi-2C/LPCle is equipped with Slew Rate limit control for RS422/485 interface and when enabled it minimizes EMI emissions which may cause data transmission errors. When Slew Rate is used maximum communication speed is 250Kbps. This function is recommended in many medical applications.

Specification

Bus Interface

Specification	PCI Express Base Specification Rev. 2.0
---------------	---

Serial

Interface	RS232, RS422/485 (Combo)
Number of ports	2
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: ±15KV
Flow Control	RTS/CTS, XON/XOFF (by Hardware or Software)
Data Crash Prevention	Auto Toggling (by Hardware or Software)

Hardware

Controller	SB16C1052PCI
Board Connector	DB25 (Male)
Cable	DB25 (Male) to DE-09P (DB9 Male)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8 LINUX SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

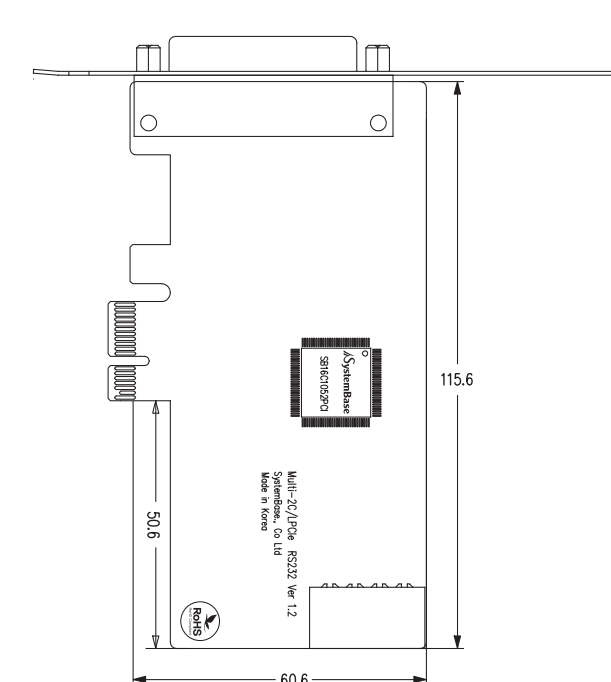
Certifications

KC, CE, FCC

Ordering Information

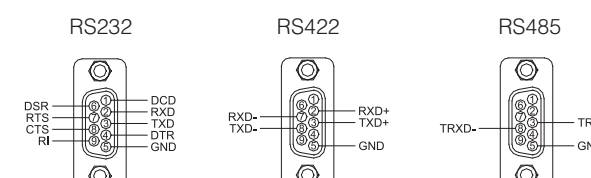
MP-023CD9MC/232	Multi-2C/LPCle D-sub 9-pin Male RS232 Board, CD(Driver, Manual and Utility)
MP-023CD9MC/Combo	Multi-2C/LPCle D-sub 9-pin Male Combo (RS422/485) Board, CD (Driver, Manual and Utility)

Dimension



unit : mm

Pin Assignment



Multi-4/LPCle



» Features

- 4 Ports Serial Card
- Supports PCI Express Base Specification Rev. 2.0
- RS-232 or RS-422/485(Combo) Interface: 4 ports
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Power Supply from pin #9: 5 or 12 V
- Auto Toggling: Automatic control I/O of the Bus for RS-422/485
- Slew-rate Limit Control
- 15KV Surge Protection

Overview

Multi-4/LPCle is equipped with PCIe to PCI Bridge and SB16C1054PCI, powerful semiconductor designed by SystemBase. The SB16C1054PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. There are RS232 and RS422/485 (Combo) models. It is ideal for POS, medical use, factory automation and building automation field.

Power Supply through Pin #9

The Multi-4/LPCle is designed to supply 5 or 12 volt power through pin #9 to power the external device. This function is ideal for connecting low power device such as barcode readers or POS printers, eliminating the need for an external power supply. (This feature is supported from version 2.0 or greater.)

Auto Toggling

The Multi-4/LPCle has a built-in hardware feature that performs automatic toggling to prevent devices from sending data at the same time causing a crash. This operation is crucial when multiple devices are connected to prevent electrical collisions that lead to errors and unstable communication.

Slew-Rate Limit Control

The Multi-4/LPCle is equipped with Slew Rate limit control for RS422/485 interface and when enabled it minimizes EMI emissions which may cause data transmission errors. When Slew Rate is used maximum communication speed is 250Kbps. This function is recommended in many medical applications.

Specification

Bus Interface

Specification	PCI Express Base Specification Rev. 2.0
---------------	---

Serial

Interface	RS232, RS422/485 (Combo)
Number of ports	4
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: ±15KV
Flow Control	RTS/CTS, XON/XOFF (by Hardware or Software)
Data Crash Prevention	Auto Toggling (by Software)

Hardware

Controller	SB16C1054PCI
Board Connector	DB44 (Male)
Panel Connector	DB44 (Male) to DE-09S (DB9 Female)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8 LINUX SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

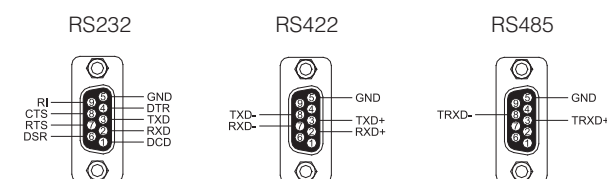
Certifications

KC, CE, FCC

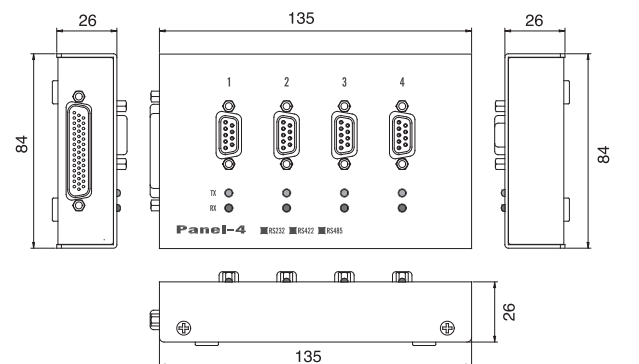
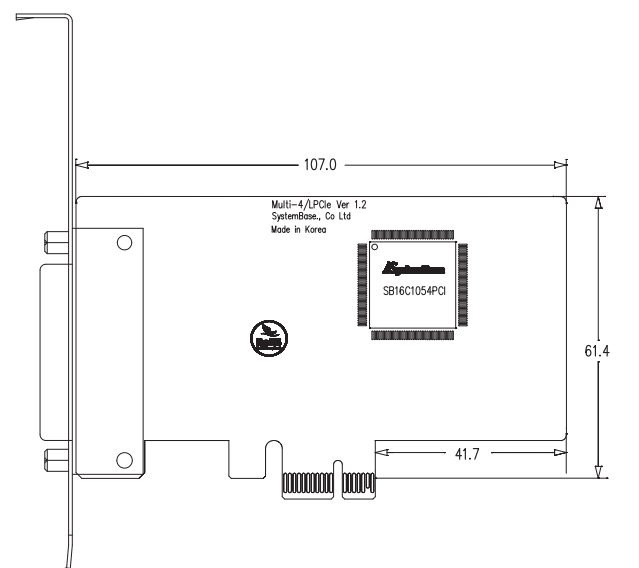
Ordering Information

MP-043PD9FC/232	Multi-4/LPCle D-sub 9-pin Female RS232 Board, CD(Driver, Manual and Utility)
MP-043PD9FC/Combo	Multi-4/LPCle D-sub 9-pin Female Combo (RS422/485) Board, CD (Driver, Manual and Utility)
PN-04D9F/232	Panel-4 Female RS232
PN-04D9F/Combo	Panel-4 Female Combo (RS422/485)

Pin Assignment



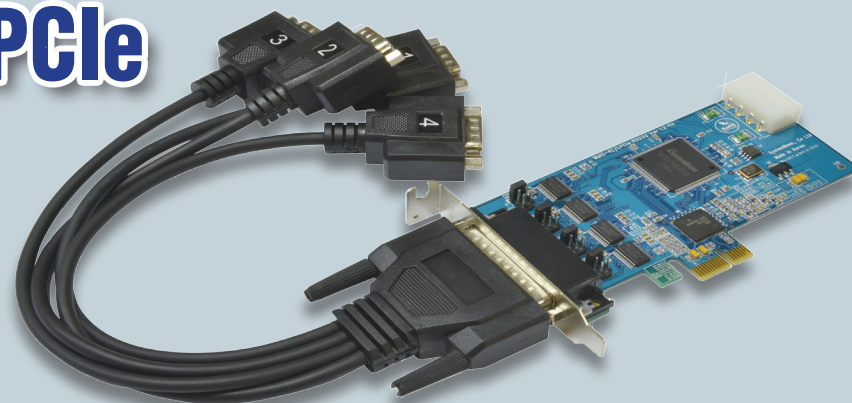
Dimension



unit : mm

Sales : marketing@sysbas.com
Technical Support : www.solvlne.com

Multi-4C/LPCle



» Features

- 4 Ports Serial Card
- Supports PCI Express Base Specification Rev. 2.0
- RS-232 or RS-422/485(Combo) Interface: 4 ports
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Power Supply from pin #9: 5 or 12 V
- Auto Toggling: Automatic control I/O of the Bus for RS-422/485
- Slew-rate Limit Control
- 15KV Surge Protection

Overview

Multi-4C/LPCle is equipped with PCIe to PCI Bridge and SB16C1054PCI, powerful semiconductor designed by SystemBase. The SB16C1054PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. There are RS232 and RS422/485 (Combo) models. It is ideal for POS, medical use, factory automation and building automation field.

Power Supply through Pin #9

The Multi-4C/LPCle is designed to supply 5 or 12 volt power through pin #9 to power the external device. This function is ideal for connecting low power device such as barcode readers or POS printers, eliminating the need for an external power supply.

Auto Toggling

The Multi-4C/LPCle has a built-in hardware feature that performs automatic toggling to prevent devices from sending data at the same time causing a crash. This operation is crucial when multiple devices are connected to prevent electrical collisions that lead to errors and unstable communication.

Slew-Rate Limit Control

The Multi-4C/LPCle is equipped with Slew Rate limit control for RS422/485 interface and when enabled it minimizes EMI emissions which may cause data transmission errors. When Slew Rate is used maximum communication speed is 250Kbps. This function is recommended in many medical applications.

Specification

Bus Interface

Specification	PCI Express Base Specification Rev. 2.0
---------------	---

Serial

Interface	RS232, RS422/485 (Combo)
Number of ports	4
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: ±15KV
Flow Control	RTS/CTS, XON/XOFF (by Hardware or Software)
Data Crash Prevention	Auto Toggling (by Hardware or Software)

Hardware

Controller	SB16C1054PCI
Board Connector	DB44 (Male)
Cable	DB44 (Male) to DE-09P (DB9 Male)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8 LINUX SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

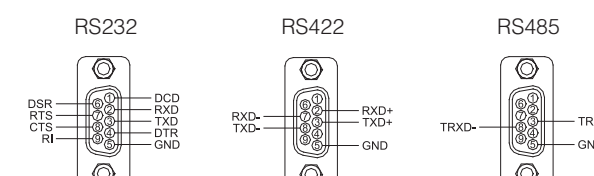
Certifications

KC, CE, FCC

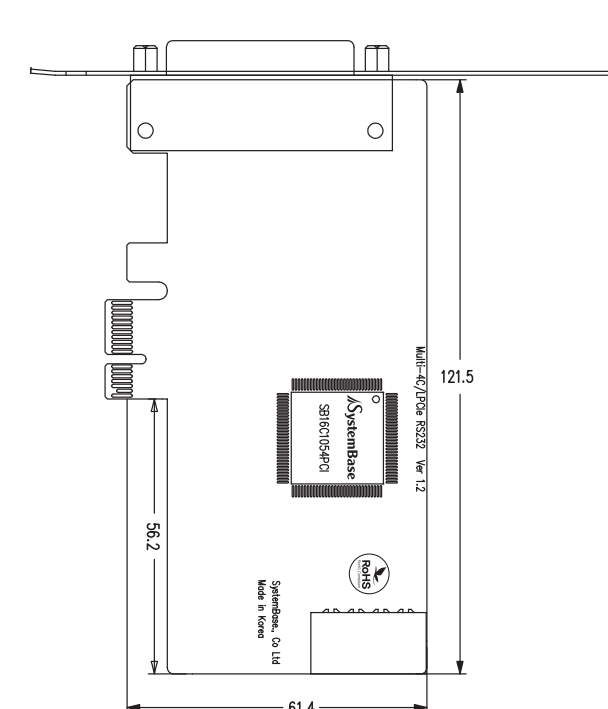
Ordering Information

MP-043CD9MC/232	Multi-4C/LPCle D-sub 9-pin Male RS232 Board, CD(Driver, Manual and Utility)
MP-043CD9MC/Combo	Multi-4C/LPCle D-sub 9-pin Male Combo (RS422/485) Board, CD (Driver, Manual and Utility)

Pin Assignment



Dimension



unit : mm

Multi-8/LPCle



» Features

- 8 Ports Serial Card
- Supports PCI Express Base Specification Rev. 2.0
- RS-232 or RS-422/485(Combo) Interface: 8 ports
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Power Supply from pin #9: 5 or 12 V
- Auto Toggling: Automatic control I/O of the Bus for RS-422/485
- Slew-rate Limit Control
- 15KV Surge Protection

Overview

Multi-8/LPCle is equipped with PCIe to PCI Bridge and SB16C1058PCI, powerful semiconductor designed by SystemBase. The SB16C1058PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. There are RS232 and RS422/485 (Combo) models. It is ideal for POS, medical use, factory automation and building automation field.

Power Supply through Pin #9

The Multi-8/LPCle is designed to supply 5 or 12 volt power through pin #9 to power the external device. This function is ideal for connecting low power device such as barcode readers or POS printers, eliminating the need for an external power supply. (This feature is supported from version 2.0 or greater.)

Auto Toggling

The Multi-8/LPCle has a built-in hardware feature that performs automatic toggling to prevent devices from sending data at the same time causing a crash. This operation is crucial when multiple devices are connected to prevent electrical collisions that lead to errors and unstable communication.

Slew-Rate Limit Control

The Multi-8/LPCle is equipped with Slew Rate limit control for RS422/485 interface and when enabled it minimizes EMI emissions which may cause data transmission errors. When Slew Rate is used maximum communication speed is 250Kbps. This function is recommended in many medical applications.

Specification

Bus Interface

Specification	PCI Express Base Specification Rev. 2.0
---------------	---

Serial

Interface	RS232, RS422/485 (Combo)
Number of ports	8
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: ±15KV
Flow Control	RTS/CTS, XON/XOFF (by Hardware or Software)
Data Crash Prevention	Auto Toggling (by Software)

Hardware

Controller	SB16C1058PCI
Board Connector	DB44 (Male)
Panel Connector	DB44 (Male) to DE-09S (DB9 Female)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8 LINUX SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

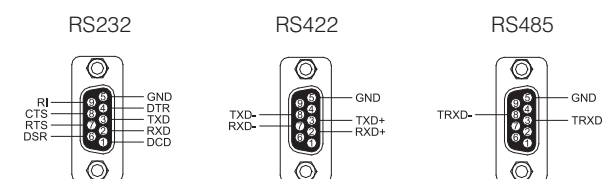
Certifications

KC, CE, FCC

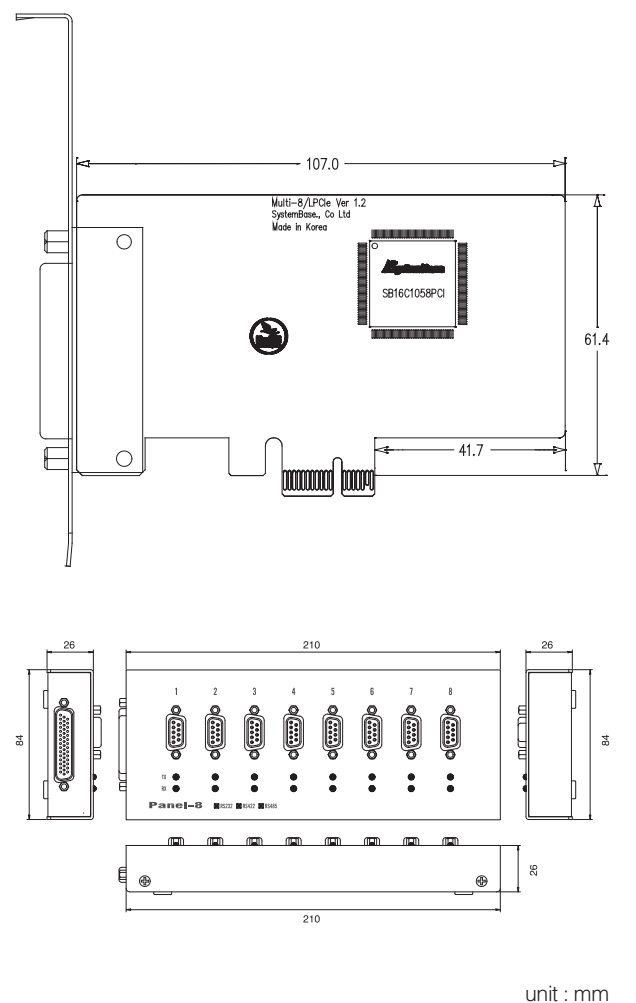
Ordering Information

MP-083PD9FC/232	Multi-8/LPCle D-sub 9-pin Female RS232 Board, CD(Driver, Manual and Utility)
MP-083PD9FC/Combo	Multi-8/LPCle D-sub 9-pin Female Combo (RS422/485) Board, CD (Driver, Manual and Utility)
PN-08D9F/232	Panel-8 Female RS232
PN-08D9F/Combo	Panel-8 Female Combo (RS422/485)

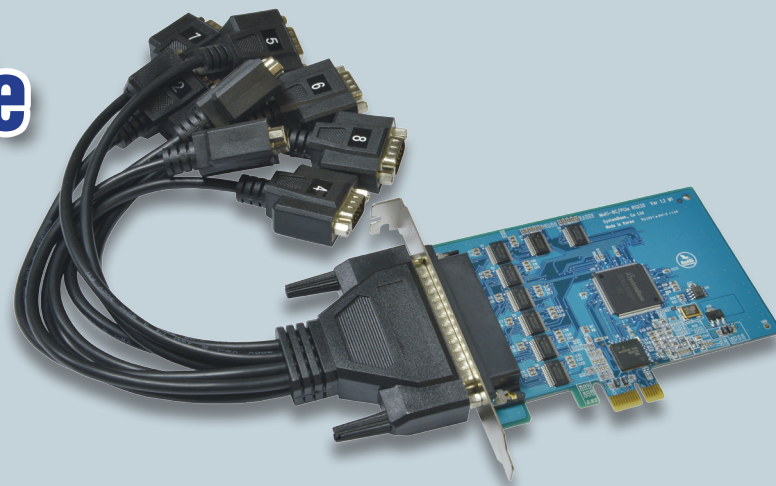
Pin Assignment



Dimension



Multi-8C/PCIe



» Features

- 8 Ports Serial Card
- Supports PCI Express Base Specification Rev. 2.0
- RS-232 or RS-422/485(Combo) Interface: 8 ports
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Auto Toggling: Automatic control I/O of the Bus for RS-422/485
- Slew-rate Limit Control
- 15KV Surge Protection

Overview

Multi-8C/PCIe is equipped with PCIe to PCI Bridge and SB16C1058PCI, powerful semiconductor designed by SystemBase. The SB16C1058PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. There are RS232 and RS422/485 (Combo) models. It is ideal for POS, medical use, factory automation and building automation field.

Auto Toggling

The Multi-8C/PCIe has a built-in hardware feature that performs automatic toggling to prevent devices from sending data at the same time causing a crash. This operation is crucial when multiple devices are connected to prevent electrical collisions that lead to errors and unstable communication.

Slew-Rate Limit Control

The Multi-8C/PCIe is equipped with Slew Rate limit control for RS422/485 interface and when enabled it minimizes EMI emissions which may cause data transmission errors. When Slew Rate is used maximum communication speed is 250Kbps. This function is recommended in many medical applications.

Specification

Bus Interface

Specification	PCI Express Base Specification Rev. 2.0
---------------	---

Serial

Interface	RS232, RS422/485 (Combo)
Number of ports	8
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: ±15KV
Flow Control	RTS/CTS, XON/XOFF (by Hardware or Software)
Data Crash Prevention	Auto Toggling (by Hardware or Software)

Hardware

Controller	SB16C1058PCI
Board Connector	DC62 (Male)
Cable	DC62 (Male) to DE-09P (DB9 Male)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8 LINUX SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

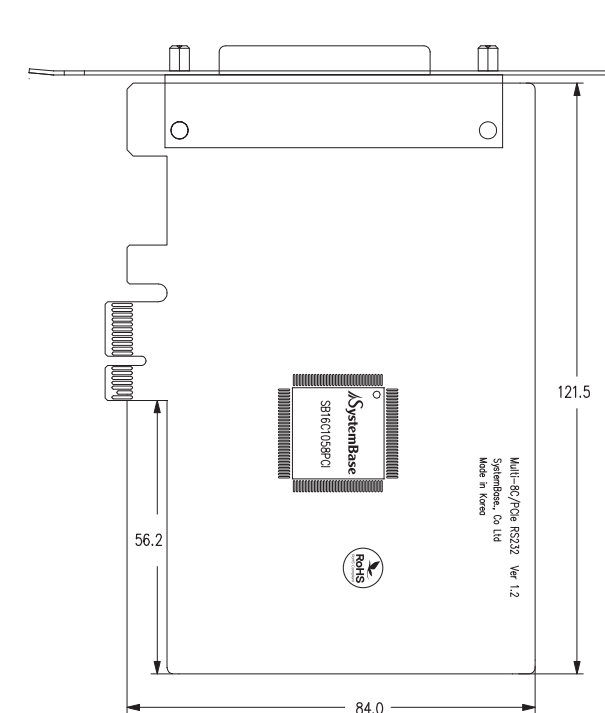
Certifications

KC, CE, FCC

Ordering Information

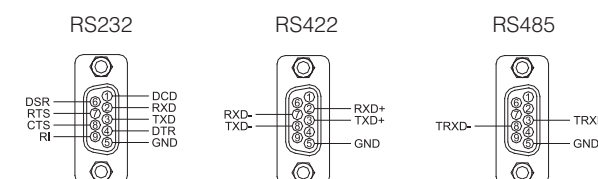
MP-083CD9MC/232	Multi-8C/LPCIe D-sub 9-pin Male RS232 Board, CD(Driver, Manual and Utility)
MP-083CD9MC/Combo	Multi-8C/LPCIe D-sub 9-pin Male Combo (RS422/485) Board, CD (Driver, Manual and Utility)

Dimension



unit : mm

Pin Assignment



Multi-32/LPCle



» Features

- Serial Card (Supports 32 Ports) with Expandable by 8 Ports Panel
- Supports PCI Express Base Specification Rev. 2.0
- RS-232 or RS-422/485(Combo) Interface: 32 ports
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 921.6Kbps
- Power Supply from pin #9: 5 or 12 V
- Auto Toggling: Automatic control I/O of the Bus for RS-422/485
- Slew-rate Limit Control
- 15KV Surge Protection

Overview

Multi-32/LPCle supports total 32 ports used with panels that can be expanded by 8 ports. It is equipped with PCIe to PCI Bridge, SB4002A and SB16C1058PCI, powerful semiconductor designed by SystemBase. The SB16C1058PCI semiconductor is a UART designed for PCI Bus which has the 256 byte FIFO, the largest in the world. There are no overrun when communicating with 921.6Kbps. It has all the necessary components for the serial communication that the developers do not require additional components to design the product. There are RS232 and RS422/485 (Combo) models. It is ideal for POS, medical use, factory automation and building automation field.

Power Supply through Pin #9

The Multi-32/LPCle is designed to supply 5 or 12 volt power through pin #9 to power the external device. This function is ideal for connecting low power device such as barcode readers or POS printers, eliminating the need for an external power supply.

Auto Toggling

The Multi-32/LPCle has a built-in hardware feature that performs automatic toggling to prevent devices from sending data at the same time causing a crash. This operation is crucial when multiple devices are connected to prevent electrical collisions that lead to errors and unstable communication.

Slew-Rate Limit Control

The Multi-32/LPCle is equipped with Slew Rate limit control for RS422/485 interface and when enabled it minimizes EMI emissions which may cause data transmission errors. When Slew Rate is used maximum communication speed is 250Kbps. This function is recommended in many medical applications.

Specification

Bus Interface

Specification	PCI Express Base Specification Rev. 2.0
---------------	---

Serial

Interface	RS232, RS422/485 (Combo)
Number of ports	32 (using four 8-port Panels)
Maximum Speed	921.6 Kbps (For 5.3Mbps model, please contact our sales representative.)
Signal Lines	RS232: TXD, RXD, DTR, DSR, RTS, CTS, DCD, GND, RI (5V or 12V) RS422: TXD+, TXD-, RXD+, RXD- RS485: TRXD+, TRXD-
Protection	Built-in ESD Protection: ±15KV
Flow Control	RTS/CTS, XON/XOFF (by Hardware or Software)
Data Crash Prevention	Auto Toggling (by Hardware or Software)

Hardware

PCI Bus Controller	SB4002A
UART	SB16C1058
Board Connector	DB44 (Male)
Panel Connector	DE-09P or DE-09S (Male or Female depending on the Panels)

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8 LINUX SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

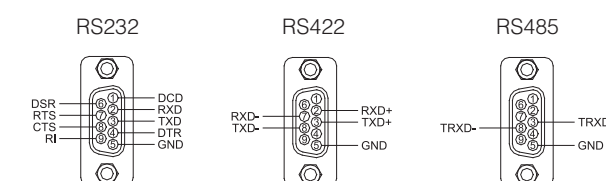
Certifications

KC, CE, FCC

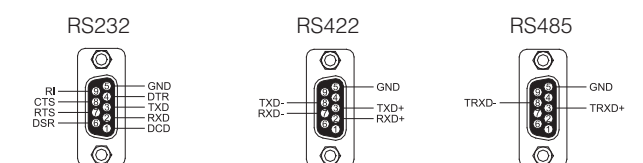
Ordering Information

MP-323PD9C/232	Multi-8/LPCle D-sub 9-pin RS232 Board, CD(Driver, Manual and Utility)
MP-323PD9C/Combo	Multi-8/LPCle D-sub 9-pin Combo (RS422/485) Board, CD (Driver, Manual and Utility)
PN-8ED9M/232	Panel-8e Male RS232
PN-8ED9F/232	Panel-8e Female RS232
PN-8ED9M/Combo	Panel-8e Male Combo (RS422/485)
PN-8ED9F/Combo	Panel-8e Female Combo (RS422/485)

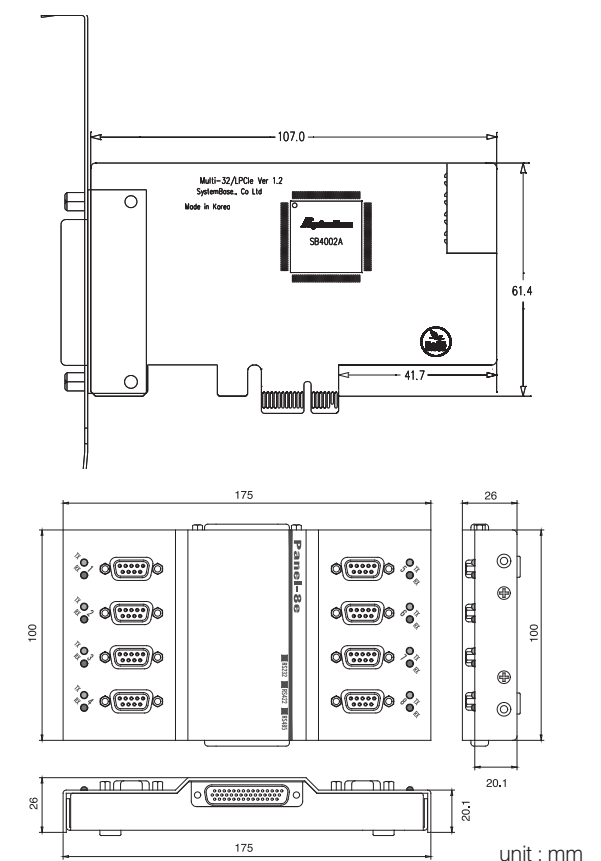
Pin Assignment (DE9 Male)



Pin Assignment (DE9 Female)

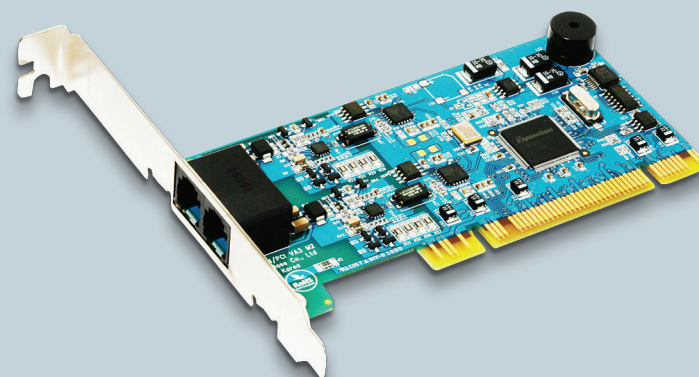


Dimension



Sales : marketing@sysbas.com
Technical Support : www.solvline.com

Multi-2M/PCI



» Features

- 2 Ports Modem Card
- Supports PCI and PCI-X Bus Interface
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 56Kbps
- Supports Port Rest by the Software

Overview

Easily add modem to your system. The Multi-2M/PCI is equipped with powerful semiconductor SB16C1052PCI by SystemBase to deliver maximum performance up to 56Kbps with 256 byte FIFO, the largest in the world, preventing overrun errors. This allows fewer needs in components, cost-effective and reliable connections to your devices through PSTN. This is ideal for RAS server, factory automation and building automation applications.

Supports Class 2 FAX

In multi-tasking configuration, class of FAX affects an error rate enormously. Unlike class 1 that administrates all works, in class 2, the modem chip administrates the negotiation. In other words, CPU load will be lighten with class 2 resulting less errors when communicating.

Reset by Software

If the RAS server is made by lots of multiple modems, when the error appears at certain port, it is difficult to deal with. But, in Multi-2M/PCI, it has a reset function at each port, that you can reset the port without turning off the server. This will let you manage the server more easily.

Specification

Bus Interface

Specification	PCI Local Bus Specification Rev. 2.3
---------------	--------------------------------------

Modem

Number of ports	2
Terminal Speed	56 Kbps
Signal Lines	ITU-T v92/90/34/32 bis/32/22 bis/22/23/21 Bell 212A/103 v42 LAPM, MNP 2-4 Error Correction v42 bis/MNP 5 Data Compression
FAX Modem	v17/29/27/21 channel 2 EIA/TIA 578 Class 1
FAX Class	1 and 2

Hardware

Modem	Conexant CX93011-21Z
UART	SB16C1052PCI
Connector	2 ports, RJ-11 Connector

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8
	LINUX
	SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

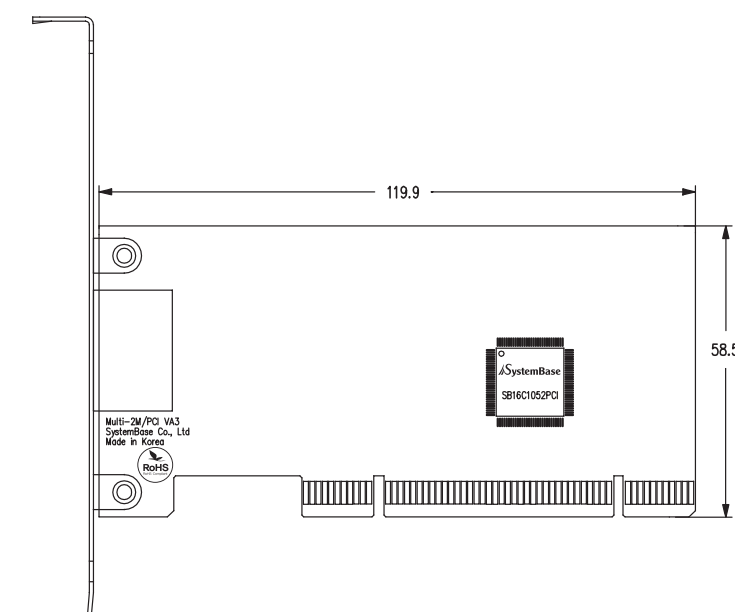
Certifications

KC

Ordering Information

MM-022RC	Multi-2M/PCI Board, CD (Driver, Manual and Utility)
----------	---

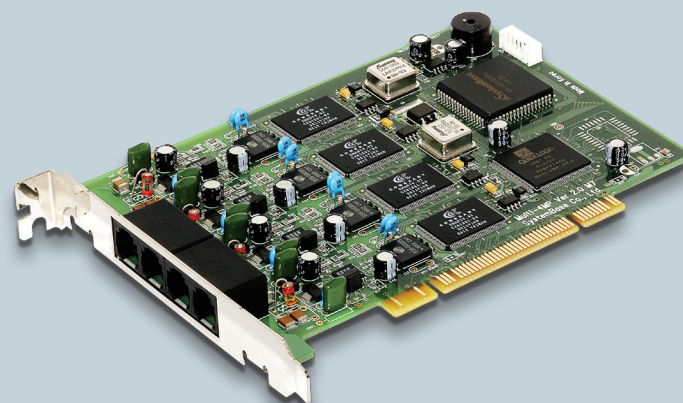
Dimension



unit : mm

Sales : marketing@sysbas.com
 Technical Support : www.solvline.com

Multi-4M/PCI



» Features

- 4 Ports Modem Card
- Supports PCI and PCI-X Bus Interface
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 56Kbps
- Supports Port Rest by the Software

Overview

Easily add modem to your system. The Multi-4M/PCI is equipped with 16C554 and SB4002A by SystemBase. The 16C554 is a general purpose UART with 16 byte standard size transmit/receive FIFO with nice compatibility. Combining these semiconductors, less components are used to design the product allowing cost-effective and reliable connections to your devices through PSTN. This is ideal for RAS server, factory automation and building automation applications.

Reset by Software

If the RAS server is made by lots of multiple modems, when the error appears at certain port, it is difficult to deal with. But, in Multi-4M/PCI, it has a reset function at each port, that you can reset the port without turning off the server. This will let you manage the server more easily.

Specification

Bus Interface

Specification	PCI Local Bus Specification Rev. 2.3
---------------	--------------------------------------

Modem

Number of ports	4
Terminal Speed	56 Kbps
Signal Lines	ITU-T v92/90/34/32 bis/32/22 bis/22/23/21 Bell 212A/103 v42 LAPM, MNP 2-4 Error Correction v42 bis/MNP 5 Data Compression
FAX Modem	v17/29/27/21 channel 2 EIA/TIA 578 Class 1
FAX Class	1

Hardware

Controller	TL16C554
Modem	CX81801-84
Connector	4 ports, RJ-11 Connector

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8
	LINUX
	SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

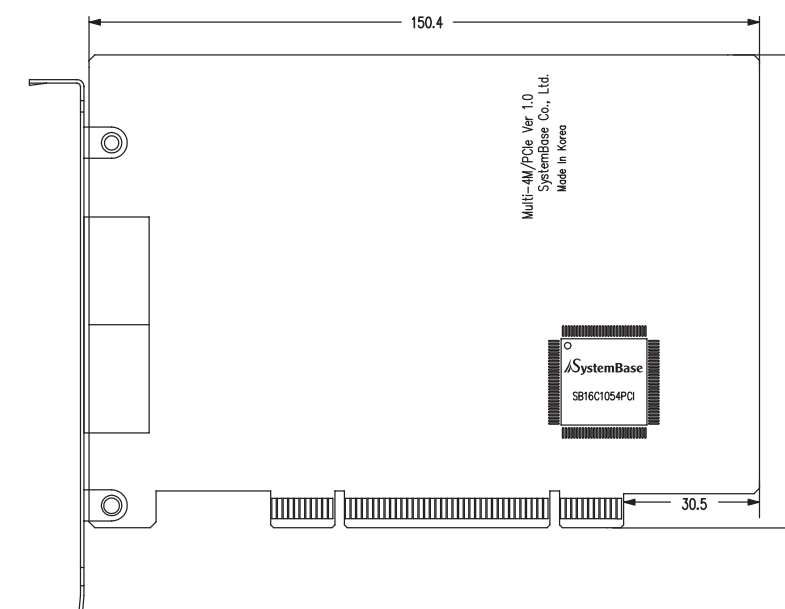
Certifications

KC, JATE

Ordering Information

MM-042RC	Multi-4M/PCI Board, CD (Driver, Manual and Utility)
----------	---

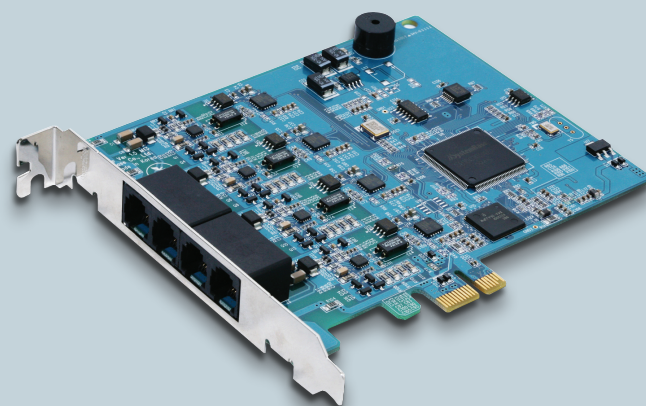
Dimension



unit : mm

Sales : marketing@sysbas.com
 Technical Support : www.solvline.com

Multi-4M/PCle



» Features

- 4 Ports Modem Card
- Supports PCI Express Base Specification Rev. 2.0
- 256 byte FIFO, the Largest Size in the World
- Maximum Communication Speed: 56Kbps
- Supports Port Rest by the Software

Overview

Easily add modem to your system. The Multi-4M/PCle is equipped with PCIe to PCI Bridge and a powerful semiconductor SB16C1054PCI by SystemBase to deliver maximum performance up to 56Kbps with 256 byte FIFO, the largest in the world, preventing overrun errors. This allows fewer needs in components, cost-effective and reliable connections to your devices through PSTN. This is ideal for RAS server, factory automation and building automation applications.

Supports Class 2 FAX

In multi-tasking configuration, class of FAX affects an error rate enormously. Unlike class 1 that administrates all works, in class 2, the modem chip administrates the negotiation. In other words, CPU load will be lighten with class 2 resulting less errors when communicating.

Reset by Software

If the RAS server is made by lots of multiple modems, when the error appears at certain port, it is difficult to deal with. But, in Multi-4M/PCle, it has a reset function at each port, that you can reset the port without turning off the server. This will let you manage the server more easily.

Specification

Bus Interface

Specification	PCI Express Base Specification Rev. 2.0
---------------	---

Modem

Number of ports	4
Terminal Speed	56 Kbps
Signal Lines	ITU-T v92/90/34/32 bis/32/22 bis/22/23/21 Bell 212A/103 v42 LAPM, MNP 2-4 Error Correction v42 bis/MNP 5 Data Compression
FAX Modem	v17/29/27/21 channel 2 EIA/TIA 578 Class 1
FAX Class	1 and 2

Hardware

Controller	Conexant CX93011-21Z
Modem	SB16C1054PCI
Connector	4 ports, RJ-11 Connector

Software

OS	Windows 2000 / XP / 2003 / Vista / 7 / 2008 / 8
	LINUX
	SCO UNIX
Utility	TestView™

Operating Environment

Operating Temperature	0 ~ 50 °C
Storing Temperature	-20 ~ 70 °C
Humidity	5 ~ 95% Non-Condensing

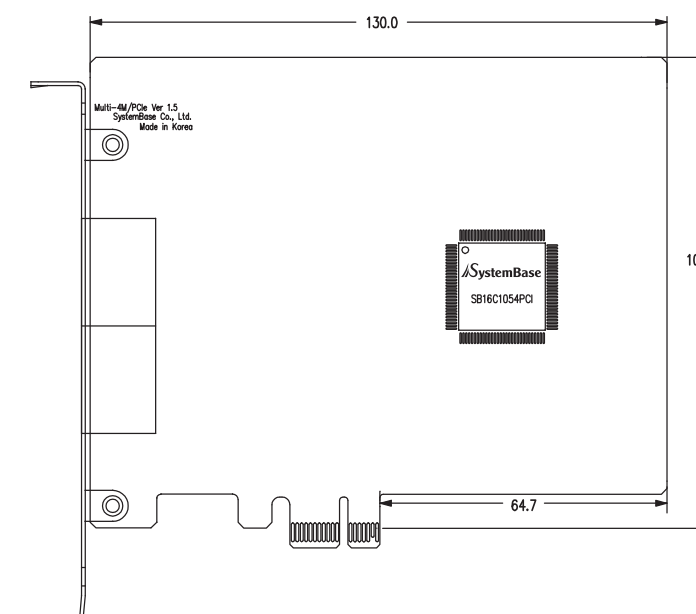
Certifications

KC, JATE

Ordering Information

MM-043RC	Multi-4M/PCle Board, CD (Driver, Manual and Utility)
----------	---

Dimension



unit : mm

Sales : marketing@sysbas.com
Technical Support : www.solvlne.com