

PCIe with serial interfaces including power

Advantages

- Serial devices do not require any external voltage supply
- Serial cards can support optionally a voltage of 5 V or 12 V
- individually adjustable via jumper

Special feature of these PCIe cards

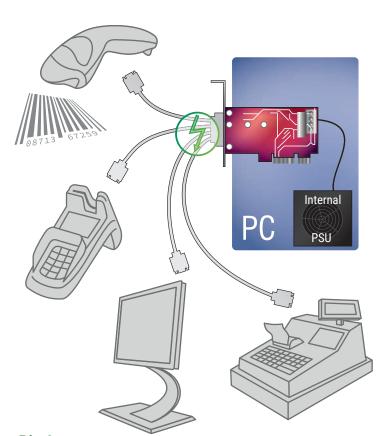
Besides the data transfer these types of PCIe cards offer a special feature. They provide current-carrying serial interfaces that can supply other connected devices with power.

Therefor it is possible to manually switch between a voltage of 5 V or 12 V using a jumper to ensure optimum use of each connected device. The two main differences between these cards are, on the one hand, the data transfer rate and, on the other hand, the pin which leads the power.

Pin 1/4/8/9

For cards with a data transfer rate of **230.4 Kb/s** the voltage can be set individually for each port: the power, which the interface receives internally from the power supply of the computer can be connected to pin 1, 4, 8 or 9.

Thereby the voltage requirement of external devices can be met (see item (1) + (2)).



Pin 9

For another group of cards the power from the internal power supply of the PC, the voltage supply will be carried only by pin 9. However a considerably higher data transfer rate of **460.8 Kb/s** (see item **3**) or up to **921.6 Kb/s** is supported. (see item (4), (5) + (6))

Among others, this technology is utilized in the area of POS systems, to be more precise, explicitly for cash register systems. For example a barcode scanner or a card reader can be connected, and then again, will be powered through the current-carrying serial interface. For this reason a separate power supply is not required.

PCI Express Card Serial with Voltage Supply (pin 1/4/8/9)

- · Connectors:
- internal:
 - 1 x PCI Express x1, V1.1
- 1 x power connector 4 pin Molex male
- external:
 - 1 x DB44 female
- connecting cable: DB44 male > 2 x OR 4 x Serial RS-232 DB9 male
- Data transfer rate up to 230.4 Kb/s
- 5 V or 12 V voltage can be set individually for each port through the jumper (Pin 1/4/8/9)
- 15 kV ESD protection on all signal pins

1 Item 89305 Chipset: Oxford OXPCle952 2 x serial RS-232 DB9 male

2 Item 89306 Chipset: Oxford OXPCle954 4 x serial RS-232 DB9 male

MiniPCle I/O PCle full size Serial RS-232 with Voltage supply

- (3) Item 95001 Chipset: Oxford OXPCle954
- on the PCB:
 - 4 x 9 pin COM port pin header male
 - 1 x 2 pin power connector
- on the cable:
- 4 x serial RS-232 DB9 male + screw nuts
- 1 x 2 pin Molex
- Interface: PCI Express revision 1.1a
- Data transfer rate up to 460.8 Kb/s
- Supports PCle Power Management • 5 V or 12 V can be set individually for
- each port through the jumper (DB9 Pin 9)



- 4 Item 95244 Chipset: Exar XR17V354
- Connectors:
- on the module:
- 4 x 10 pin pin header male
- on the slot bracket (standard) 2 x:
- 2 x serial RS-232 DB9 male with screw nuts
- OR on the slot bracket (low profile) 4 x: 1 x serial RS-232 DB9 male with screw nuts
- Interface: PCI Express revision 2.0
- Data transfer rate up to 921.6 Kb/s
- Selectable voltage supply 5 V / 12 V or RI (pin 9)



PCI Express Card Serial with Voltage Supply (Pin 9)

- 6 Item 89333 Chipset: Exar 17V352
- · Connectors:
- external:
- 1 x Serial RS-232 Sub-D 9 Pin male internal:
 - 1 x PCI Express x1, V2.0
 - 1 x 4 pin Molex power connector
- Data transfer rate up to 921.6 Kb/s Selectable voltage supply 5 V / 12 V
- or RI (Pin 9) Further voltage supply 5 V / 12 V
- of pin 1 is possible
- 15 kV ESD protection for all signals



- 6 Item 89335 Chipset: Exar 17V354
- · Connectors:
- external:
 - 1 x Sub-D 44 Pin female connecting cable: Sub-D 44 pin male > 4 x Serial RS-232
 - Sub-D 9 Pin Stecker
- internal:
- 1 x PCI Express x1, V2.0
- 1 x 4 pin Molex power connector
- Data transfer rate up to 921.6 Kb/s Selectable voltage supply 5 V / 12 V
- or RI (Pin 9)
- 15 kV ESD protection for all signals



