RS-232 6/8/16 Port PCI-Express Controller Card

User Manual
Ver. 1.00

General description

The XR17V358 series Multi-I/O PCI-Express Controller cards are the high performance Rs232 serial interface controller for home and industrial users. They are compatible with industrial standard 16C550 UART, which provide a low cost connection platform for industrial machineries, POS machines, external Modems, mice, etc.

Features

- PCIe 2.0 Gen 1 compliant
- x1 Link, dual simplex, 2.5Gbps in each direction
- Expansion bus interface
- Up to 25 Mbps serial data rate
- 16 multi-purpose inputs/outputs (MPIOs)
- 16-bit general purpose timer/counter
- Sleep mode with wake-up Indicator
- Operating temperature range: -40℃ to 85℃

6x Serial (6S) Model

- Supports 6 independent 9-pin RS232 Serial ports
- 256-byte TX and RX FIFOs
- Programmable TX and RX Trigger Levels
- TX/RX FIFO Level Counters
- Fractional baud rate generator
- Automatic RTS/CTS or DTR/DSR hardware flow control with programmable hysteresis
- Automatic Xon/Xoff software flow control
- Multi-drop with Auto Address Detection
- Infrared (IrDA 1.1) data encoder/decoder
- 2 x Bracket with two DB9 male serial ports

8x Serial (8S) Model

- Supports 8 independent 9-pin RS232 Serial ports
- 256-byte TX and RX FIFOs
- Programmable TX and RX Trigger Levels
- TX/RX FIFO Level Counters
- Fractional baud rate generator
- Automatic RTS/CTS or DTR/DSR hardware flow control with programmable hysteresis
- Automatic Xon/Xoff software flow control
- Multi-drop with Auto Address Detection
- Infrared (IrDA 1.1) data encoder/decoder
- Bundle with an 8-port (DB9) fan-out cable

16x Serial (16S) Model

- Supports 16 independent 9-pin RS232 Serial ports
- 256-byte TX and RX FIFOs

- Programmable TX and RX Trigger Levels
- TX/RX FIFO Level Counters
- Fractional baud rate generator
- Automatic RTS/CTS or DTR/DSR hardware flow control with programmable hysteresis
- Automatic Xon/Xoff software flow control
- Multi-drop with Auto Address Detection
- Infrared (IrDA 1.1) data encoder/decoder
- Bundle with two 8-port (DB9) fan-out cable

Applications

- Next generation Point-of-Sale Systems
- Remote Access Servers
- Storage Network Management
- Factory Automation and Process Control

System Requirements

- Windows® Server 2003, 2008, 2012
- Windows® XP, Vista, 7, 8
- Linux 2.6.27, 2.6. 31, 2.6.32, 3. x. x and newer
- PCI Express-enabled system with an available PCI Express slot

Driver Locations

All the drivers for the Following PCI Express cards are located in these directories of the Driver CD

Installation

Before the installation of the controller card, let us make the following assumptions:
The end users must have the basic knowledge of installing an internal device and its driver to a PC. If they are not sure about their abilities or have any queries, please call their local dealers immediately, or find somebody who are experienced and qualified for assistance.
The computer has been properly installed with our supported Windows operating system

Installing the controller card into the computer

1. Take the PCI-Express Controller card out from the packaging. When 16x Serial (16S) Model, insert the FC-60P cable provided into the pin headers on both the main controller card and accessory board. Beware of the orientation of the header.
2. Turn off your computer and all external devices connect to it.
3. Disconnect your computer from the power sources.
4. Open the computer case. Refer to your computer user manual for more details.
5. Find an available PCI-Express x1 slot and remove the slot bracket on the back panel of the computer case. Save the bracket screw for later use.

6. Align the controller card horizontally with respect to the slot and insert it into the slot firmly and evenly. Take care not to force it into the slot. Once you have properly positioned the controller card into the slot, fasten it to the computer case with the screw you have just saved.

7. Remove the bracket next to the controller and mount the accessory board on the back panel. 8x Serial (8S) Model does not need this step.

8. Connect the 8-port (DB9) fan-out cable(s) to controller card and accessory board (only for 16x Serial Model).

9. Secure the computer case and switch on your computer.

Installing Windows driver for the controller card

1. Once Windows is running, a new controller card is detected.
2. Insert the **Drivers & Utility** CD into the CDROM, assume drive D
3. When Windows ask for the driver for the new controller card, browse to the following folder

   D: \XR17V35X\XR17V358_6S... (PCE358-6S)

   D: \XR17V35X\XR17V358_8/16S...(PCE358-8S/16S)

4. Press **OK** to confirm.
5. Press **Next** to continue with the installation.
6. Follow the on-screen instructions until driver installation is completed.

Checking the status of the installed driver

1. Right click on the icon of **My Computer** and choose **Properties**
2. Choose Device Manager
3. Left click on the "+" sign of the **Multifunction adapters**
4. The device ID of the chipset should be shown
5. Left click on the "+" sign of the **Ports (COM & LPT)**
6. The corresponding number of Serial ports available should be shown
7. Right click on the device above and choose **Properties** on both cases
8. Check the Device status in the **General** window. The following should be shown:

   This device is working properly