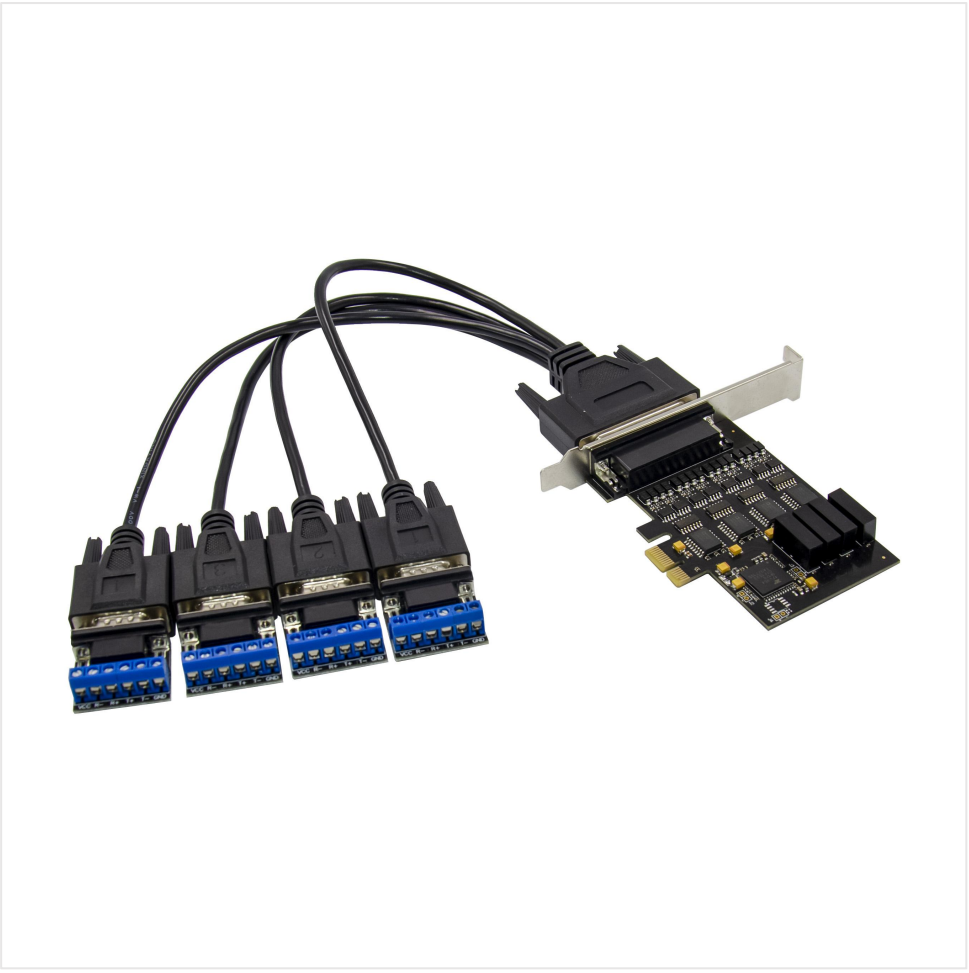
深圳市欧鑫通信息科技有限公司

OX-MSC622I PCI Express RS422/RS485 Multi-I/O Card

USER Manual



Description

The PCI Express RS422/RS485 Multi-Port I/O card is used EXAR's high performance chipset 17V352,17V354.it is compliant to PCIe 2.0 Gen 1(2.5GT/s),and it has two /four serial port each port has many enhanced features such as the 256-bytes TX and RX FIFOs, Programmable Fractional Baud Rate Generator, Automatic Hardware or Software Flow control, auto RS485 half-duplex direction control, with maximum 1.2kM transmission distance ,can support a variety of application scenarios.

Specification

- Compliant with PCI Express Specification Revision 2.0
- X1 link dual simplex .2.5Gbps in each direction
- Supports x1,x2,x4,x8 ,x16(lane)PCI Express slots
- RS485 Signal: T+(A),T-(B),GND
- RS422 Signal: T+,T-,R+,R-,GND
- 600W surge protection,15KV ESD protection for all serial ports
- Working mode: asynchronous working, point-to point or point-to-multipoint 2wires(half duplex),4wires(full duplex)
- Maximum up to 1.2KM transmission distance in RS485/RS422 mode(300bps-921600bps)
- Transmission media: twisted-pair cable or shielded cable
- Interface protection:600W surge protection,15KV ESD protection for all serial ports,2500Vrms magnetic coupling isolation voltage protection. high common-mode transient immunity :25KV/ μ s,1000V DC-DC power supply isolation module protection.
- UART interface support for 7 or 8 data bits,1 or 2 stop bits and Even/odd/ mark / space/none
- Flow control :none, hardware and Xon/Xoff
- Sleep mode with wake –up indicator
- Load capability: support point-to-multiport transmission, Each converter can connect 32 RS422 or RS-485 interface equipment
- Operating temperature range:-40 to 85℃

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Package content

- 1 x PCI Express RS422/RS485 Multi-Port I/O card
- 1 x User's Manual
- 1x CD driver
- DB9 to 5pin converter
- 1 x serial 44pin to 9pin cable

System Requirements

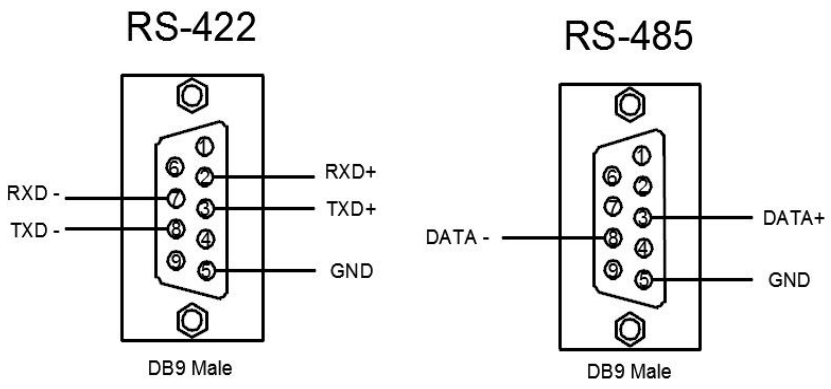
- Windows®2000/XP/Server2003/Vista/Win7/Win8/Win8.1 /win10, 32 or 64bit
- Linux2.6.27,2.6.31,2.6.32,3.x.x and later
- An available PCI Express X1/X2/X4/X8/X16 Slot

Applications:

- Next generation Point-of sale systems
- Remote Access Servers
- Storage network management
- Factory automation and Process Control

Hardware Signal:

DB9 Signal		
1	RS422	RS485
2	R+(RXD+)	
3	T+(TXD+)	T+(DATA+)(A+)
4		
5	GND	GND



6		
7	R-(RXD-)	
8	T-(TXD-)	T-(DATA-)(B-)
9		

Hardware installation

1. Turn off the computer and unplug the power cord
2. Remove the computer cover and the adapter slot cover from the slot that matches your adapter
3. Insert the adapter edge connector into the slot and secure the bracket to the chassis
4. Replace the computer cover ,then plug in the power cord
5. Power on the computer

Drivers installation

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

Installing windows driver for the controller card

1. once windows is running, insert the drivers CD into the CD-ROM assume drive D
2. when the windows ask for the driver for the new hardware, browse to the following folder :

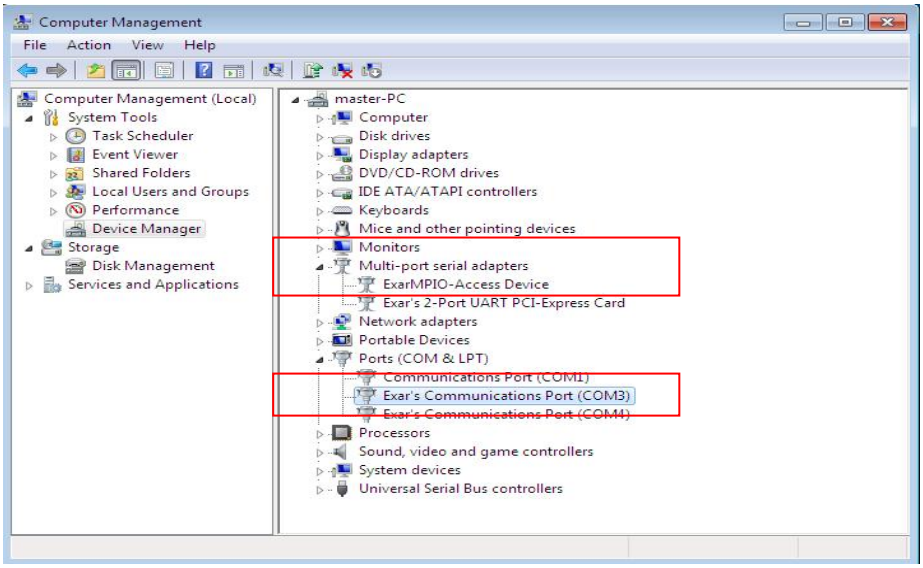
   type: D:\XR17V35X\XR17V352…..(2S)

   D:\XR17V35X\XR17V354……(4S)

   D:\XR17V38X\XR17V385……(8S)
3. Press OK to confirm
4. Follow the On-screen instruction to complete installation

Verify Driver installation

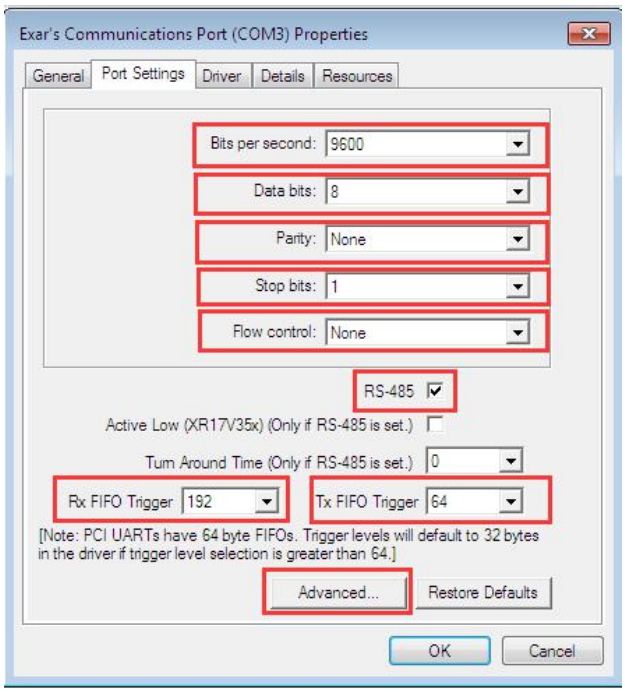
When the driver installed, you can use Windows “Device Manager” to verify proper installation. click on the “Programs and F…eatures tab in the windows “ **control panel**” you should see the board under Multi-Port serial adapters, also you should see “**Exar’s communications port**” under Ports(COM&LPT)

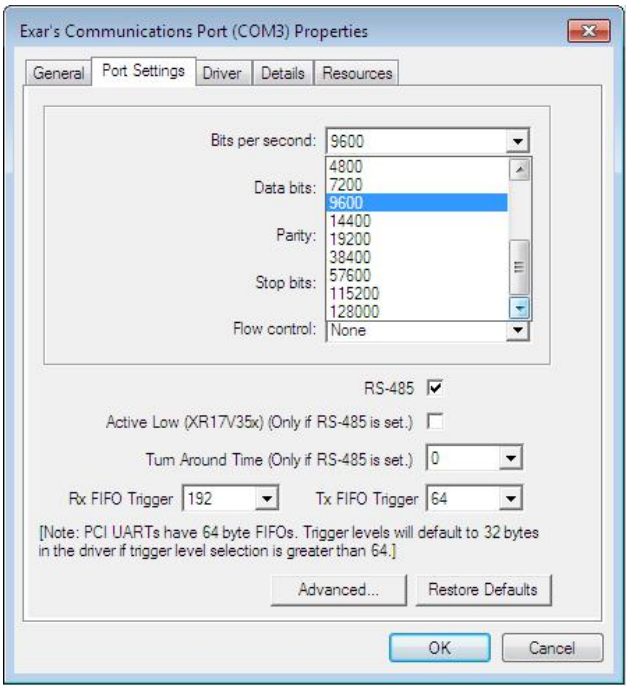


Serial Port Setting

Right click the “**Exar’ Communications port**” item from the “**Ports(COM&LPT)**” sub-tree and click “**Properties**” ,click “**Port settings**” tab.

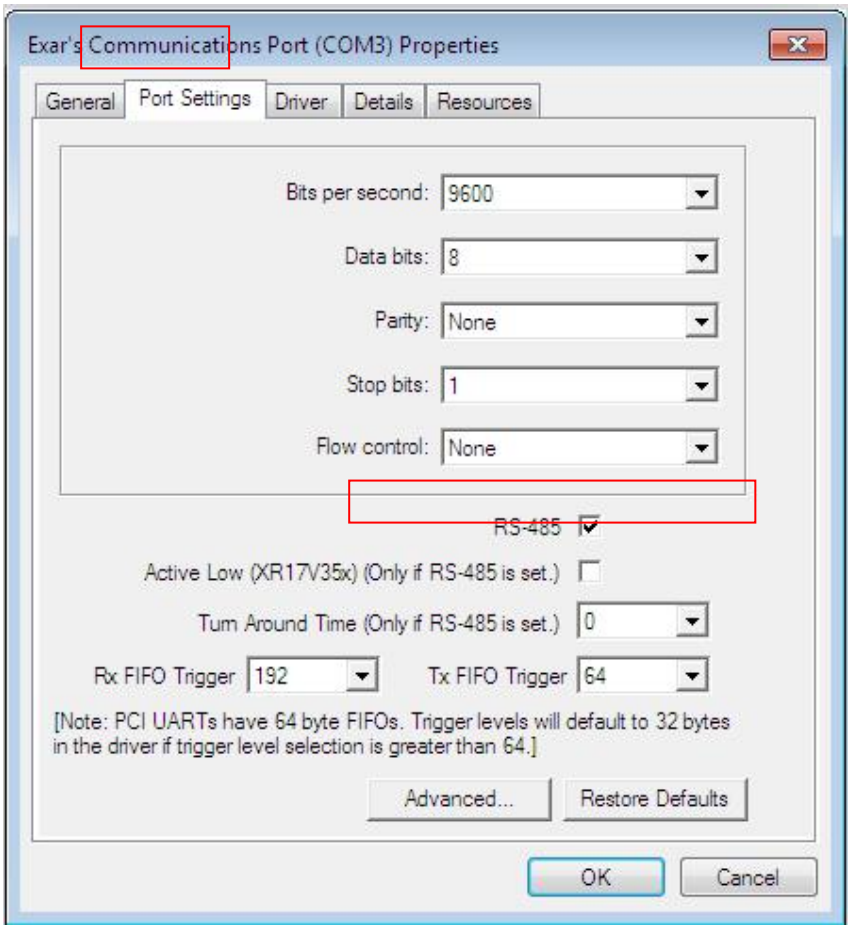
UART MODE(Default auto RS-422)





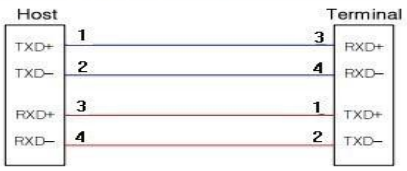
User can select RS-422 or RS-485 interface for each COM port.

Connection Instruction

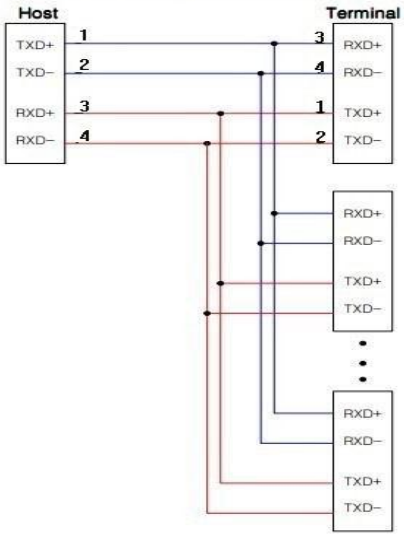


1. For RS422 connecting

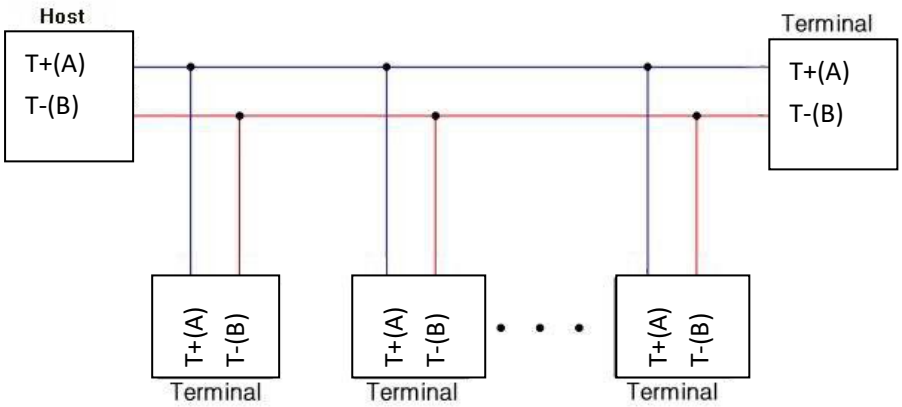
<RS422 Point to Point Networking>



<RS422 Multi-Drop Networking>



2 For RS-485 Connecting



Support

More information and settings, please refer to the User Guides or you can contact us.