

Main Features

- PCI-Express x1 Lane Bus interface 2.0 compliant
- PCIe to 4 port RS-232 / RS-485 / RS-422
- Automatic hardware or software flow control
- Max data rate: 20Mbps in RS-485/422 Modes and up to 1Mbps in RS-232 Modes.
- Provide programmable 16 multi-purpose inputs/outputs (MPIOs)
- Provide transient protection for each line to IEC 61000-4-2 (ESD) ±30kV (air/contact)  
IEC 61000-4-4 (EFT) 80A (5/50ns)  
IEC 61000-4-5 (Lightning) 25A (8/20µs)
- Industrial design, manufactured in Taiwan

Product Overview

The PRS338Q PCI Express 4-port serial I/O card is a high-speed serial I/O expansion card for PCI Express bus. Connecting to a PCI Express bus on your computer, the PCI Express 4-port serial I/O card instantly adds four serial I/O communication ports and additional programmable 16bit GPIO to your system.

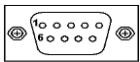
Each UART of the XR17V354 has many enhanced features such as the 256-bytes TX and RX FIFOs, programmable fractional baud rate generator, automatic hardware or software flow control, auto RS-485 half-duplex direction control.

Specifications

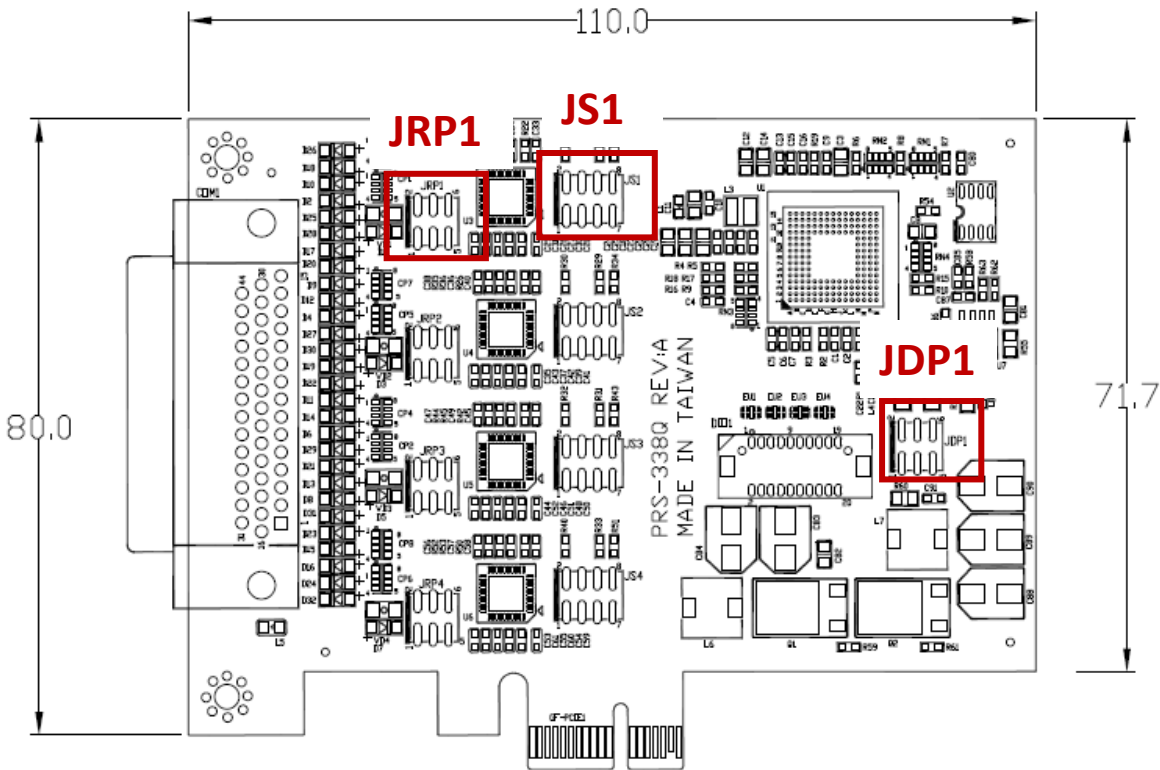
Module Name	PRS338Q
Module Type	PClex1 to four port RS232, RS485, RS422 Card
Input interface	PCI Express 2.0
Output Connector	One 44 pin connector to 4*DB9 connector cable One 20 pin connector for programmable 16 bit GPIO
Transmission Speed	Max. Data Rate: 20Mbps in RS-485/422 Modes 1Mbps in RS-232 Modes
Output Connector Jumper Setting	Jumper Setting: JS1~JS4 - select RS232/RS485/RS422, termination default close JRP1~JRP4 - DB9 PIN9 Out Voltage, +5V & +12V & RI (default) DIO1 - DIO PIN9 & PIN19 Out Voltage, +5V & +3.3V (default)
Compatible Operating System	Windows XP / Vista / 7 / 8 / 8.1 / 10 Windows Server 2003 / 2008 Linux 2.6.27, 2.6.31, 2.6.32 and newer
Dimensions	110 x 72 (mm)
Operating Temperature	-40°C-85°C

Pin definition

COM 1~4



Pin	RS232 Signal Name	RS485 Signal Name	RS422 Signal Name
1	DCD, Data carrier detect	RS-485 DATA-	RS-422 TX-
2	RXD, Receive data	RS-485 DATA+	RS-422 TX+
3	TXD, Transmit data		RS-422 RX+
4	DTR, Data terminal ready		RS-422 RX-
5	GND, ground	GND, ground	GND, ground
6	DSR, Data set ready		
7	RTS, Request to send		
8	CTS, Clear to send		
9	RI, Ring indicator		

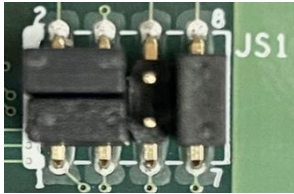


Type Select (RS232 as default)

SELECT TYPE	RS232	RS485	RS422
JS1~4	1-3	3-5	1-3
	2-4	4-6	4-6

Receiver Termination Setup (Close as default)

Termination On	Close
JS1~4	7-8



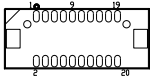
DB9 PIN9 RI Out Voltage Setup (RI as default) (+5V MAX 500mA, +12V MAX 250mA)

RI OUT	+5V	RI	+12V
JRP[1-4]	1-2	3-4	5-6



# Pin definition

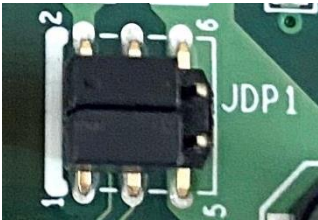
## DIO1 PIN DEFINE



Pin	Signal Name	Pin	Signal Name
1	GPIO4	2	GPIO0
3	GPIO5	4	GPIO1
5	GPIO6	6	GPIO2
7	GPIO7	8	GPIO3
9	+5V & +3.3V Select	10	GND
11	GPIO12	12	GPIO8
13	GPIO13	14	GPIO9
15	GPIO14	16	GPIO10
17	GPIO15	18	GPIO11
19	+5V & +3.3V Select	20	GND

DIO PIN9 & PIN19 Out Voltage Setup  
(+3.3V as default)  
(+3.3V Max. 750mA, +5V Max. 500mA)

JDP1	+3.3V	+5V
PIN9 OUT	1-3	3-5
PIN19 OUT	2-4	4-6



## Ordering Information

### PRS338Q

- PCIe to 4 ports RS232, RS485, RS422 w/ 25cm 4 ports DB9 cable x1
- Provide driver source code for 16bit GPIO API development

