

# 8S RS232 Multi Serial PCI Express Card Installation Guide

## 1. Introduction

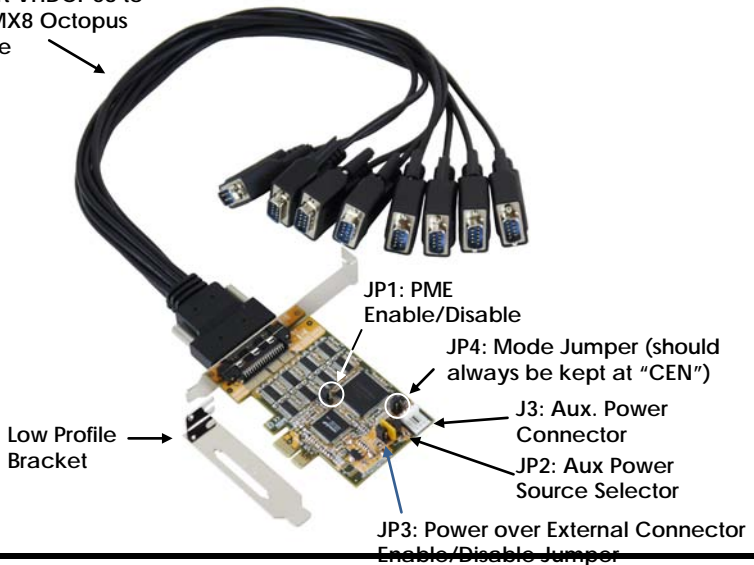
Congratulation on your purchasing this high performance PCI Express multi-serial host adapter. The adapter is high speed PCI Express bus based and plug-and-play compliant. Its serial ports are fully 16C1050 UART compatible with most of the RS232C devices available from the market.

### Features:

- ✓ Full x1 PCI Express Throughput, 250Mbytes/sec
- ✓ Fully Compliant with PCI Express Base Specifications, Revision 1.0a
- ✓ 256-byte FIFO UARTs, Fully Compatible with 16C1050, Baud Rate up to 921.6Kbps
- ✓ Supports 8 RS232 ports over one single VHDCI-68 Octopus Cable
- ✓ Supports Win 2000 and XP, 2003, 2008, Vista, Win 7, 8.x, 10 and Linux

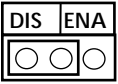
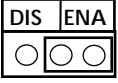
## 2. Board Layout

8-port VHDCI-68 to  
DB9MX8 Octopus  
Cable



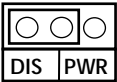
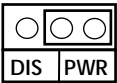
### 3. Jumper Settings

- **JP1 – PME Enable/Disable Jumper:** This jumper is to enable the PCIe card to wake up the system by its serial ports. The default was set at “DIS” (disabled).

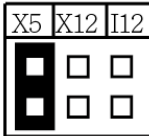
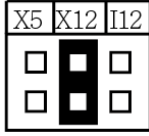
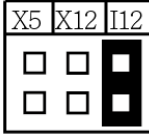
JP1	Settings
PME Disabled	 (default)
PME Enabled	

- **JP3: - Pin-9 Power Enable/Disable Jumper:** The design of all DB9 male connectors have an option to supply DC power to their Pin-9. Pin number 9 of the DB9 connector was defined for RS232 RI (Ring Indicator) signal. Since some applications do NOT use this signal, in this case, Pin-9 can be used to deliver DC power for the serial devices. This product provides 2 settings: “Disable” and “Enable”. When Disabled, the Pin-9 for all DB9 connectors are not connected to DC power. When Enabled, the Pin-9 of all DB9 connectors are supplied the DC power selected by JP2.

**Pin-9 Power Enable/Disable Setting Table:**

JP3	Jumper Settings
Disable Power on Pin-9 (Default)	 (default)
Enable Power on Pin-9	

## ■ JP2 - AUX. POWER Source Selector:

JP2	Settings
<b>External 5V:</b> Power source is +5VDC, from J3 AUX power connector. (Default)	
<b>External 12V:</b> Power source is +12VDC, from J3 AUX power connector.	
<b>Internal 12V:</b> Power source is +12VDC, from PCIe golden finger (motherboard's PCIe slot)	

- **JP4 – Factory Use Only:** This jumper is only for factory production test purpose, please always keep its jumper at “CEN”.

## 4. Installing the PCI Express I/O Adapter

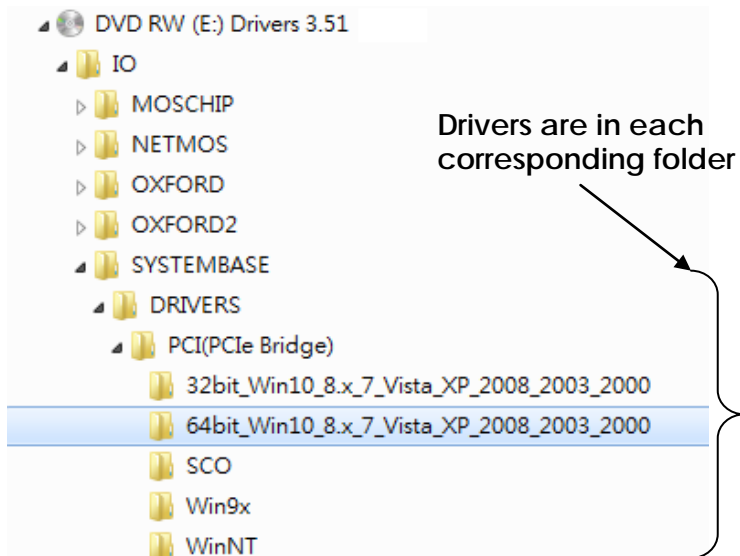
1. Turn the system power OFF before installation!
2. Use static electricity discharge precautions, Remove the chassis cover from your computer
3. Locate an unused PCI Express slot (typically white and smaller) and remove the corresponding slot cover from computer chassis.
4. Plug the I/O card to the unused PCI Express expansion slot and attached the I/O card bracket to the computer chassis screw.
5. Installing the supplied VHDCI-68-to-DB9MX8 octopus cable and serial cables to your serial devices.
6. Put the chassis cover back on the computer.
7. Turn ON the power of your computer and peripherals.
8. Proceed with Software Driver Installation.

## 5. Software Driver Installation



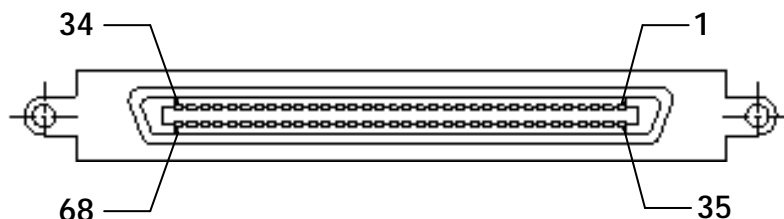
### Note:

PLEASE DO NOT LET WINDOWS AUTO SEARCH THE DRIVERS ON THE CD, it will cause problems because the INF files will be conflict in this case. Instead, please browse to the correct location (folder) manually to make sure the correct drivers are chosen and installed correctly.



## 6. VHDCI68 Connector Pin Assignments

### VHDCI68-Female Connector Pin Assignments

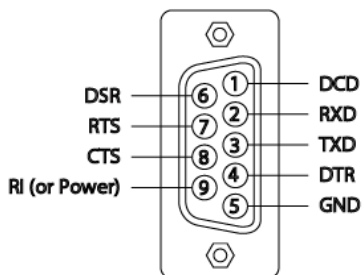


VHDCI68	Port#-Pin#
1	P1-1
2	P1-2
3	P1-3
4	P1-4
5	P1-6
6	P1-7
7	P1-8
8	P2-1
9	P2-2
10	P2-3
11	P2-4
12	P2-6
13	P2-7
14	P2-8
16	P3-1
19	P3-2
21	P3-3
23	P3-4
24	P3-6
25	P3-7
26	P3-8
27	P4-1
28	P4-2
29	P4-3
30	P4-4
31	P4-6
32	P4-7
33	P4-8
17+18+51+	P1-9, P2-9, P3-9, P4-9, P5-9, P6-9, P7-9, P8-9
34,68: No Connection	

VHDCI68	Port#-Pin#
35	P5-1
36	P5-2
37	P5-3
38	P5-4
39	P5-6
40	P5-7
41	P5-8
42	P6-1
43	P6-2
44	P6-3
45	P6-4
46	P6-6
47	P6-7
48	P6-8
50	P7-1
53	P7-2
55	P7-3
57	P7-4
58	P7-6
59	P7-7
60	P7-8
61	P8-1
62	P8-2
63	P8-3
64	P8-4
65	P8-6
66	P8-7
67	P8-8
15+20+22+49+54+ 56, shielding	P1-5, P2-5, P3-5, P4-5, P6-5, P7-5, P8-5, shielding

## DB9-Male Pin Assignments:

### RS232 Pin Assignment



## 7. Specifications

Type	Specifications
Connector	VHDCI-68
Cable	VHDCI-68-to-DB9MX8 Octopus type
Bus Interface	PCI Express x 1
Number of Ports	8
RS-232 Signals	TXD, RXD, RTS, CTS, DTR, DSR, DCD, GND
Baud Rate	110 bps to 921.6Kbps
Data Bits	5,6,7,8
Stop Bits	1, 1.5, 2
I/O address/IRQ	Plug-and-Play (various)
Parity	None, Even, Odd
Flow Control	RTS/CTS, XON/XOFF
Power Requirement	3.3V/150mA
Operating Temperature	0 to 55°C(32 to 132°F)
Operating Humidity	5 to 95% RH
Storage Temperature	-20 to 85°C (-4 to 185°F)