antaira®

4S RS232 Multi Serial PCI Express Card
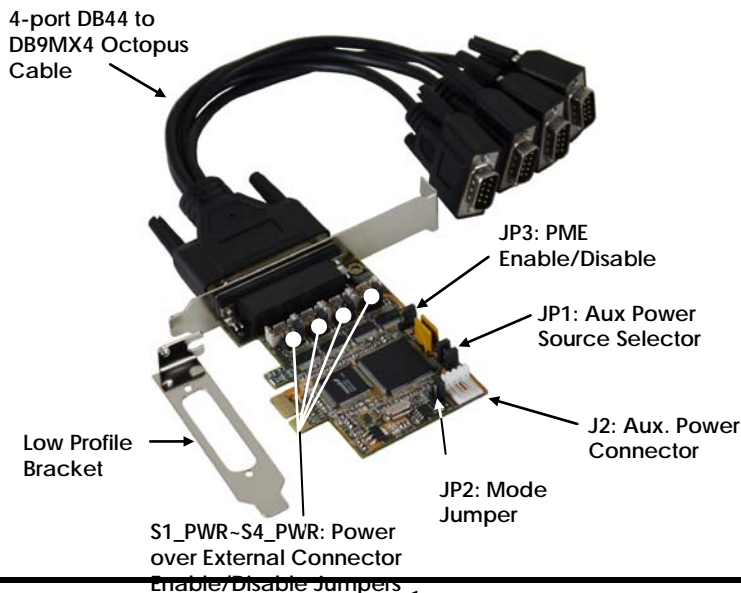## Installation Guide

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 16C950 UART compatible with most of the RS232C devices available from the market.
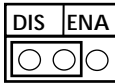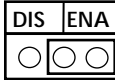
Features:

- ✓ **Full x1 PCI Express Throughput, 250Mbytes/sec**
- ✓ **Fully Compliant with PCI Express Base Specifications, Revision 1.0a**
- ✓ **256-byte FIFO UARTs, Fully Compatible with 16C950, Baud Rate up to 921.6Kbps**
- ✓ **Supports 4 RS232 ports over one single DB44 Octopus Cable**
- ✓ **Supports Win 2000 and XP, 2003, 2008, Vista, Win 7, 8.x, 10 and Linux**

2. Board Layout

4-port DB44 to DB9MX4 Octopus Cable

JP3: PME Enable/Disable

JP1: Aux Power Source Selector

J2: Aux. Power Connector

Low Profile Bracket

JP2: Mode Jumper

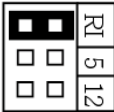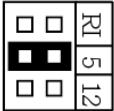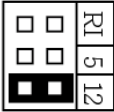**S1_PWR~S4_PWR: Power over External Connector Enable/Disable Jumpers**

3. Jumper Settings

■ **JP3 – 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).
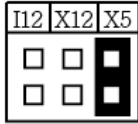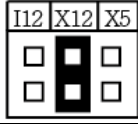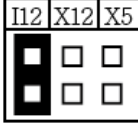
JP3	Settings
PME Disabled	(default)
PME Enabled	

■ **S1_PWR, S2_PWR, S3_PWR and S4_PWR: - Pin-9 Power Setting Jumpers for S1, S2, S3 and S4 Respectively:** The design of each DB9 male connector has an option to supply DC power to its 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 for the power, +5V and +12V. The default factory setting was set at "RI", i.e. no power supplied on the DB9M connector's pin-9.

Pin-9 Power Setting Table:

S1_PWR~S4_PWR	Jumper Settings
No Power Supplied on Pin-9 (Default)	
+5V DC on Pin-9	
+12V DC on Pin-9	

■ **JP1 - AUX. POWER Source Selector:**

JP1	Settings
External 5V: Power source is +5VDC, from J2 AUX power connector. **(Default)**	I12 X12 X5
External 12V: Power source is +12VDC, from J2 AUX power connector.	I12 X12 X5
Internal 12V: Power source is +12VDC, from PCIe golden finger (motherboard's PCIe slot)	I12 X12 X5

■ **JP2 – 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.
3. Remove the chassis cover from your computer
4. Locate an unused PCI Express slot (typically white and smaller) and remove the corresponding slot cover from computer chassis.
5. Plug the I/O card to the unused PCI Express expansion slot and attached the I/O card bracket to the computer chassis screw.
6. Installing the supplied DB44-to-DB9MX4 octopus cable and serial cables to your serial devices.
7. Put the chassis cover back on the computer.
8. Turn ON the power of your computer and peripherals.
9. 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.

Drivers are in each corresponding folder
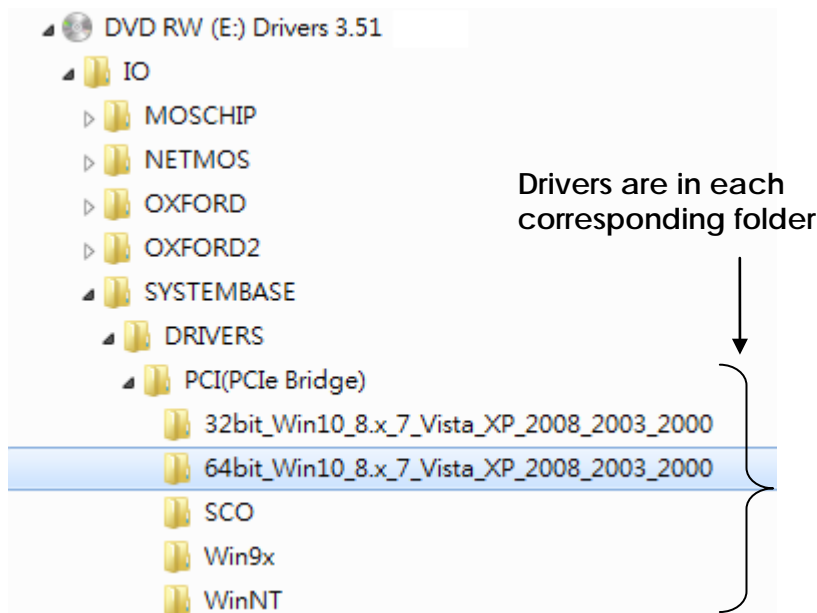
6. DB44 (female) Pin Assignments

■ **DSUB44-Female Connector Pin Assignments**
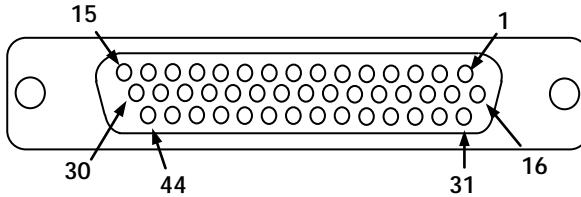
Port 1		Port 2		Port 3		Port 4	
42	DCD1	39	DCD2	35	DCD3	31	DCD4
14	RXD1	10	RXD2	6	RXD3	2	RXD4
13	TXD1	9	TXD2	5	TXD3	1	TXD4
29	DTR1	25	DTR2	21	DTR3	17	DTR4
44	GND1	41	GND2	37	GND3	33	GND4
30	DSR1	26	DSR2	22	DSR3	18	DSR4
15	RTS1	11	RTS2	7	RTS3	3	RTS4
28	CTS1	24	CTS2	20	CTS3	16	CTS4
43	RI1* (PWR1)	40	RI2* (PWR2)	36	RI3* (PWR3)	32	RI4* (PWR4)

*Note: Pin#43, 40, 36, 32 are connected to RI signal or the DC power will depend on the jumper settings of the host card

No connection pins: 4, 8, 12, 19, 23, 27, 34, 38

■ **DB9-Male Pin Assignments:**

RS232 Pin Assignment
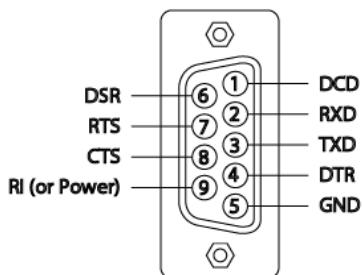
7. Specifications

Type	Specifications
Connector	DB44 Female
Cable	DB44M-to-DB9MX4 Octopus type
Bus Interface	PCI Express x 1
Number of Ports	4
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)