MSC-108B

Installation Guide

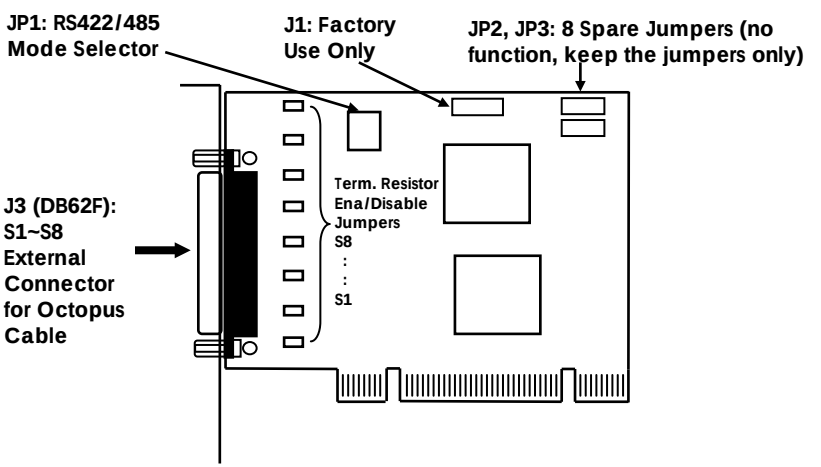
1. Introduction

Thank you for purchasing this 8-port RS422/485 serial PCI Card. It is a high performance serial port adapter that is specially designed to connect RS422(4-wire) or RS485(2-wire) serial devices to any computer with PCI slots. It supports all enhanced features with its 16C950 UARTs that defined by serial port specifications.

Features:

- ✓ Fully PCI Bus Specifications 2.2 compliant
- ✓ Supports 8 RS422/485 over one single PCI slot
- ✓ 16C950 UART, built-in 128-byte on-chip FIFO
- ✓ Up to 921.6 Kbps baud rate, over 700 Kbps data throughput
- ✓ Precise RS485 ATTA™ (Auto Transceiver Turn Around) feature to disable the line driver by hardware
- ✓ Optional 15KV ESD surge protection model is available
- ✓ Supports Windows 98SE, 2000 and XP, 2003, Vista

2. Connector and Jumper Layout



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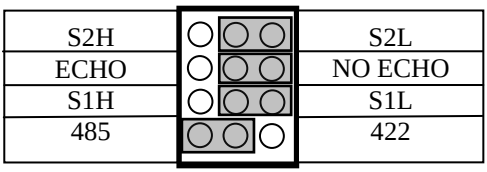
3. Jumper Settings

- **RS485 User:** Since the factory jumper settings are initially set at 2-wire RS485 mode. There is no need to change any jumper settings from the default settings.
- **RS422 User:** Change the mode jumper away from the **"485"** position. Keep the other settings unchanged.

1. Mode Jumpers:



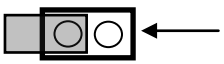
Mode Settings for all S1~S8 Ports (JP1):

Jumper Name	Jumper Positions	Mode and Termination Resistor Setting
S2H/S2L	**S2L (Default)**	Reserved for Future Use. Please do NOT change it.
ECHO/NO ECHO	ECHO	Transmitting data will be echoed back
	NO ECHO (Default)	No echo data
S1H/S1L	**S1L (Default)**	Reserved for Future Use. Please do NOT change it.
422/485	**485 (Default)**	2-wire RS485 mode
	422	4-wire RS422 mode

- **Please note that if the mode were set at "422" mode, the ECHO settings will take no effect.**
- **The Echo mode is useful for the application program to detect if the RS485 bus were in a collision. If the echoed data was not equal to the transmitted data, then the bus was in a collision.**

2. S1~S8 Termination Resistor Enable/Disable Jumpers (JP4,JP6,JP8,JP10,JP5,JP7,JP9,JP11):

Note: Please use the spare jumpers that were kept on JP2 and JP3. They were kept there to prevent from loosing.



RS485 TXD Termination Resistor Enable/Disable

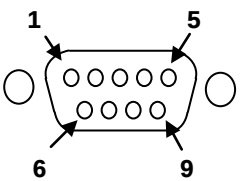
Terminator Settings (JP4 for S1, JP6 for S2, JP8 for S3, JP10 for S4, JP5 for S5, JP7 for S6, JP9 for S7, JP11 for S8):

Jumper Name	Jumper Settings	Termination Resistor Setting
S1 TERM (S2 TERM)	IN	TXD (DATA- and DATA+) Termination Resistor Enabled
(S3 TERM) (S4 TERM) (S5 TERM) (S6 TERM) (S7 TERM) (S8 TERM)	**OUT** **(Default)**	TXD (DATA- and DATA+) Termination Resistor Disabled

Note: **IN :** Jumper Installed
OUT : Jumper Not Installed

3. S1~S4 Connector Pin Assignments

The RS422/485 signals are connected by a DB62 octopus cable to 8 DB9-male connectors, the DB9-male pin assignment as follows:



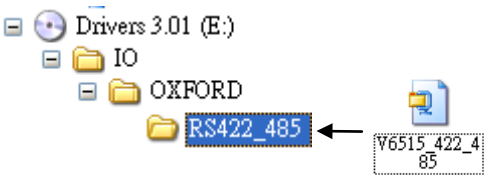
9 Pins	Signal
1	TXD- (DATA-)(A)
2	TXD+ (DATA+)(B)
3	RXD+
4	RXD-
5	GND
6	-
7	-
8	-
9	-

4. Driver Installation for Win2000, XP and Vista

Note:

1. **The drivers for Windows are shipped in the following folder (E:\IO\OXFORD\RS422_485) of the driver CD.** The files are in ZIP format (e.g. V6515_RS422_485.ZIP). Please copy the file to your hard drive C: or what folder you want, unzip it before proceeding with your installations. We assumed you copy the file to your hard drive C: root directory, and the unzipped folder is V6515_RS422_485. Please do NOT use the drivers in its parent directory, E:\IO\OXFORD, since they are used for RS232 instead of RS422/485.

2. **PLEASE DO NOT LET WINDOWS AUTO SEARCH THE DRIVERS AMONG THE FOLDERS**, 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.



The Zip file is shipped in this folder

Drivers for different OS are unzipped to different folders