

## Introduction

This manual is applicable to Blastronix model 422/4S-PCI & 422/2S-PCI unit. Your unit was supplied with the 16C954 UARTs. The power-on defaults will cause it to look like standard 16C550 UARTs. The 16C550 is equipped with 16 byte transmit and receive FIFO's to help insure against loss of data and maximize hardware efficiency. The UARTs can be configured for 128 byte transmit and receive FIFO's

## Hardware Installation

The unit is very simple to install. If you are using 422 (4 wire applications including multidrop) or 485 (2 wire applications) set the jumpers at the left hand side of the card accordingly for each port. For example the factory default will have the jumpers all in the 422 4-wire & normal position. This setting assumes a 4 wire application. If the port is being used for 422 then nothing needs to be done to the jumpers. However, if you are using the port for 485 operation (2 wire operation) then you need to move the 2 jumpers in the 2-wire location. With a jumper in the 422 location and moving the other jumper from normal to the "TEST" location will force an on-board loop-back connection.

## Software / Driver Installation for NT

With Windows 95, 98, ME, 2000 and XP applications, the system will recognize the presence of a new PCI device. When prompted install your CD in your CD ROM drive and select the "have disk" option when the operation system is asking you where to look for the proper device driver. For NT applications, simply click on the install icon from the NT directory on your installation disk. You may copy the files to your hard drive to a folder of your choice. Double click on the install Icon. The installer will find the card and make the necessary PCI assignments and modifications to the registry.

## Interrupts and Addresses

The installation and addresses are automatically assigned. This is not a user controllable parameter. The user may influence the IRQ assignment by changing PCI slots or installing different cards in a different order. Machines with an AMI BIOS also give you the ability to influence the PCI selection to some extent. If you move a card to a different slot, you must run the un-installer and then run the installer again.

## High Speed Option Header

At the upper right side of the unit is the jumper option for high speed applications. The factory default will have the 115K option selected. This sets the top speed for the card at 115.2 K baud. All standard com drivers support this setting. If you wish to use the higher speed setting simply move the jumper to the desired top speed. The other options are 230K baud 460K and 920K baud.

If you are not using a com driver that specifically supports these higher speeds then your actual speed will be a multiple of your selected speed. For example most comm. packages assume a top speed of 115.2K baud. 460K baud is four times this speed. If you set the jumper for 460K and use a standard com driver to select your baud rate then your actual baud rate will be four times as fast.

## Pin-Out

With jumpers installed on the "4-wire" & "Normal" locations marked on the silkscreen, the port will have the transmit signals on connector pins 4 & 9. The receive signals are on pins 7 & 8. This functionality is summarized in the table below. If you are using 2-wire "485" operation, then TX/RX+ will be on pin 7 and TX/RX- will be on pin 8.

PIN #	422	485
1	CHASSIS GND	CHASSIS GND
2	-	-
3	-	-
4	TX-	-
5	-	-
6	-	-
7	RX+	TX+RX+
8	RX-	TX-RX-
9	TX+	-

## 2 Wire Mode Jumper (485 mode) Example

If a port is being used in 422 mode the associated jumper at U17 should be in the "off" position. For example if ports 1 & 2 are being used for 2 wire operation with the rest of the ports being used for 422 four wire operation, then positions 1 & 2 of the jumper should be shunted with positions 3 & 4 open. **To configure the driver for 2 wire 485 mode in In98/ME or 2000 go to: System/device manager/com & lpt ports (double click on com port), select "settings", select 485 & DTR function as "Active High".**

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**422/2S & 422/4S-PCI**

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**USER MANUAL**

**VERSION 3.5**