

Introduction

This manual is applicable to Blastronix model 422/2SPNCL-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. In NT systems the INF file will set the transmitter FIFO level to 80 and the receiver FIFO to 64.

Hardware Installation

The unit is very simple to install. Simply install the unit into any available PCI slot. Start the computer. With Windows 95, 98 and 2000 applications, the system will recognize the presence of a new PCI device. When prompted install your CD in a 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.

Software / Driver Installation for NT

With Windows 95, 98, 2000 and XP applications, the system will recognize the presence of a new PCI device. When prompted install your CD in a 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 user controllable parameter. The user may influence the IRQ assignment by changing PCI slots or installing different cards in 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 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 com 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.

Terminating Resistors

The terminating resistor shunts should be installed for normal end to end transmission in 422 mode. The shunts should be removed if the port sits somewhere in between other ports as in a multi drop environment. The jumper for the terminating resistor is labeled TRM and has either an "A" or "B" position. The jumper (If termination is desired) should be in the "A" position when J10 is installed. If J10 is not installed then the terminator should be in the "B" position if termination is desired. For ports where no termination is desired, the shunt should be removed all together.

422 Pin-Out

The pin-out for each port is controlled by the jumper labeled "J10" on each port. The ports are identified as port 1 and port 2 on the card. With the 422 jumpers installed, the port will have the transmit signals on connector pins 3 & 8. The receive signals are on pins 2 & 7. With the "422" jumper removed for a port the transmit signals will be on pins 2 & 7, and receive signals will be on pins 3 & 8. This functionality is summarized in the table below. The factory default will have the J10 jumpers installed.

PIN #	422 Jumper Installed	(J10)422 Jumper Open
1	CHASSIS GND	CHASSIS GND
2	RX-	TX-
3	TX+	RX+
4	NC	NC
5	NC	NC
6	GND	GND
7	RX+	TX+
8	TX-	RX-
9	NC	NC

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422/2SPNCL-PCI

USER MANUAL

VERSION 1.0