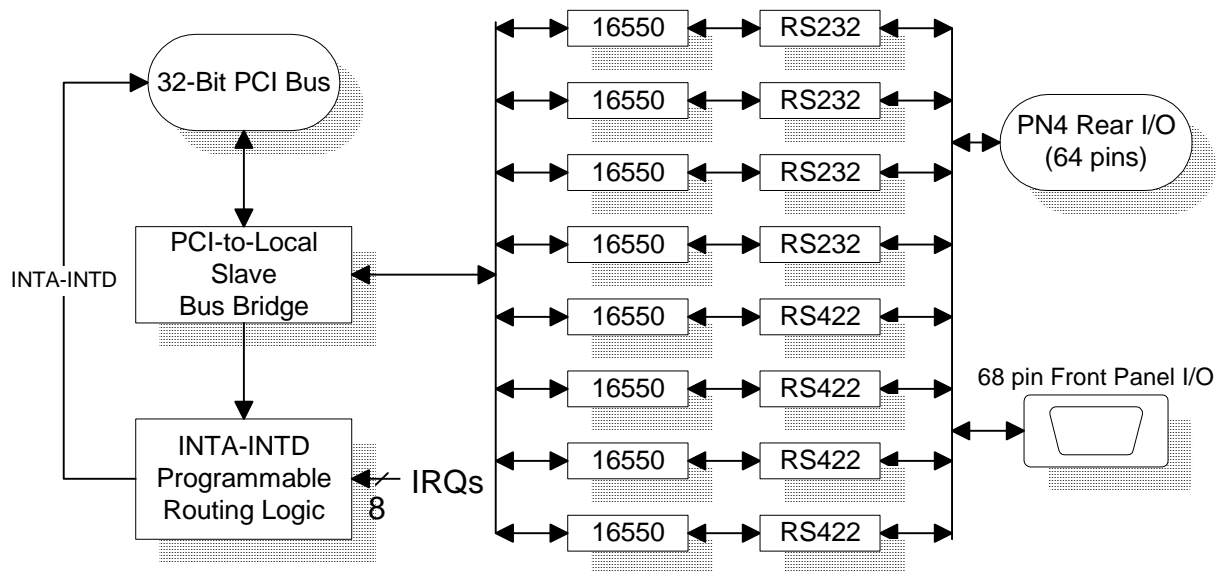# 8-Port RS-232/RS422 Async Communication Adapter

The Technobox 8-Port Async Communication adapter provides eight 16550-based UARTS, with four ports using RS232 signal levels, and four ports using RS422 signal levels.

The four RS232 ports each provide the full set of data and modem control lines configured for DTE (i.e., computer side) operation:

RTS	(Request to Send)
CTS	(Clear to Send)
TXD	(Transmit Data)
RXD	(Receive Data)
DCD	(Data Carrier Detect)
DTR	(Data Terminal Ready)
DSR	(Data Set Ready)
RI	(Ring Indicator)

The four RS422 ports each provide two differential inputs, and two differential outputs, as follows:

RTS+	(Request to Send Positive)
RTS-	(Request to Send Negative)
CTS+	(Clear to Send Positive)
CTS-	(Clear to Send Negative)
TXD+	(Transmit Data Positive)
TXD-	(Transmit Data Negative)
RXD+	(Receive Data Positive)
RXD-	(Receive Data Negative)

For RS422 ports, each differential pair is terminated by a 150 OHM parallel resistor located on the PMC card.

All eight ports are available out the PMC front panel via a 68-pin SCSI-style connector. Also, the ports are wired to the P4 connector at the rear of the PMC, al-lowing connection of all eight ports to the VMEbus P2 connector for host processors supporting rear-I/O connection.

A transition panel available from Technobox converts the 68-pin SCSI style connector into eight 9-pin male D-Subminiature connectors, which are pinned-out according to the Personal Computer standard (RS232 signals).
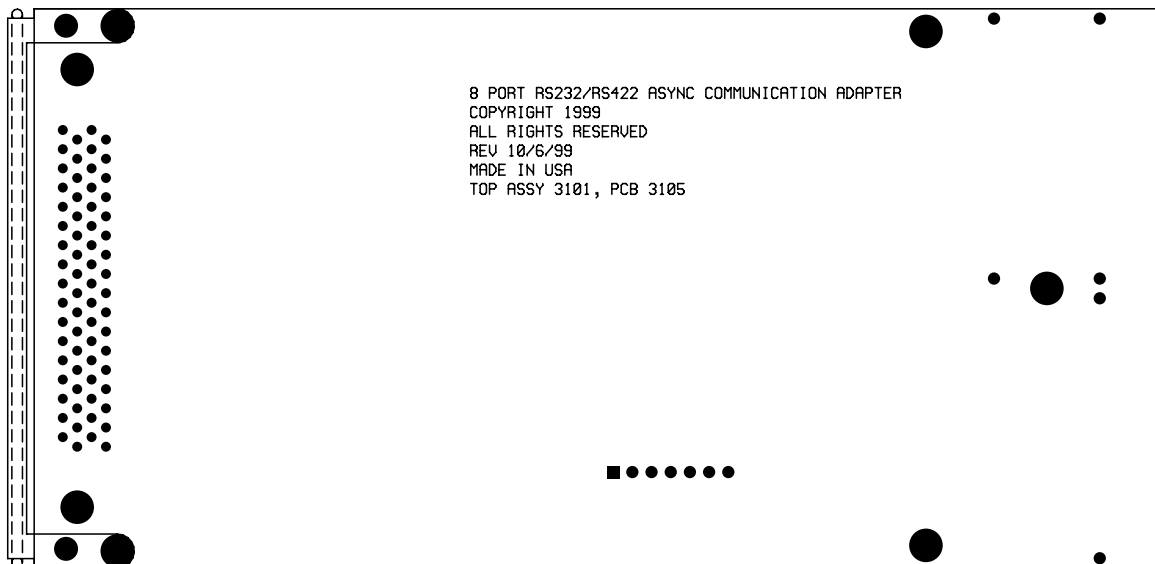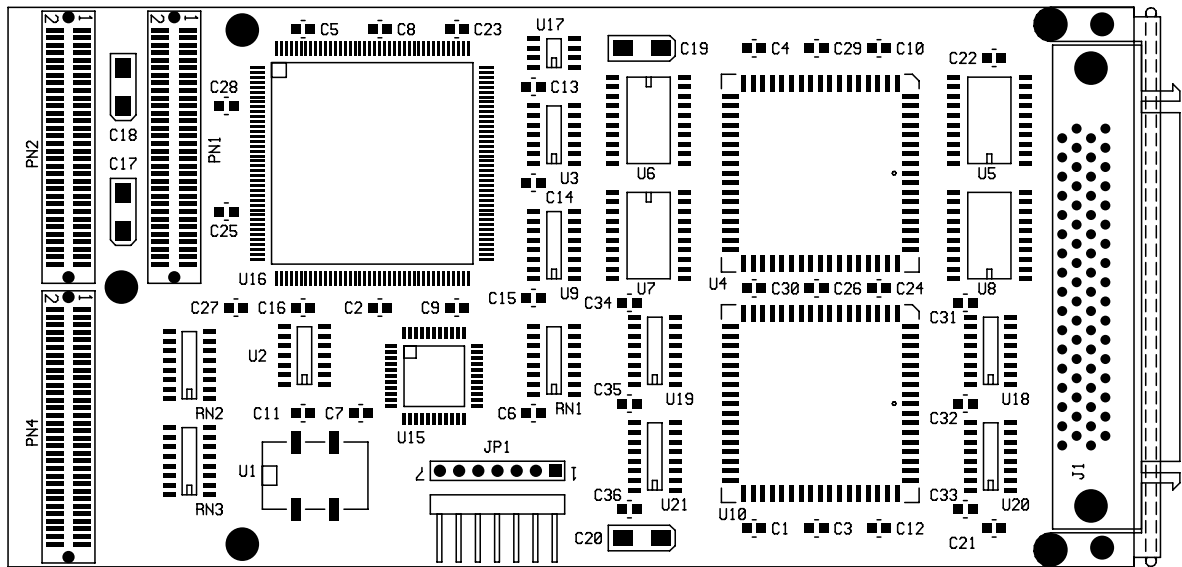
The transition panel may also be mounted at any convenient point in a user's system.   For more information, refer to the transition panel products found at the back of this catalog.

The UARTs operate at standard baud rates from 300 baud to 115K-baud.   Other odd-baud rates are possible and are available on special order.

The eight interrupt requests from each UART are routed to one of the four INTx lines on the PCI bus.   This design avoids interrupt routing switches by incorporating a programmable element which can be set up from the host processor, allowing any UART to be routed to any INTx request line.   The default after reset is all UART interrupt requests are routed to the INTA line.

The 16550 register set is accessed from the host processor using Programmed-I/O.   "C" source code is provided with the board to illustrate how to set up the PCI bus bridge in order to access the UART registers. Once the registers are mapped into host I/O space, standard async communication drivers may be used to access the ports.

8-Port RS232/RS422 Async Communication Adapter


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8 PORT RS232/RS422 ASYNC COMMUNICATION ADAPTER
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REV 10/6/99
MADE IN USA
TOP ASSY 3101, PCB 3105
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Product Summary

Technobox Part Number :	3101
Typical Power Dissipation:	TBD watts
Power Supplies Required:	+5, +12, -12
PCI Signaling Environment:	5 Volt

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