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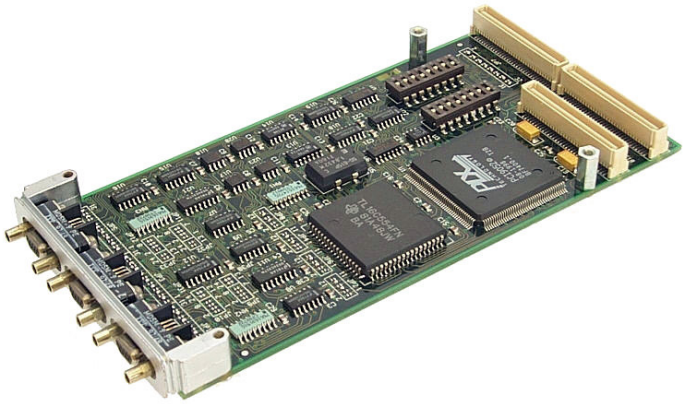
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Find the *Elma / Advanced Control Technology 8012* at our website: *Click HERE*

Systems By Design

8012 – 4 Port RS232/RS422/RS485 Asynchronous Communication Adapter



The ACT 4-port Asynchronous Communications Adapter is a cost-effective solution for providing additional RS232/RS422/RS485 based serial ports for a host processor.

- Provides sixteen 16550 based UART's using RS422 or RS485 signaling
- Each port provides 2 pairs of RS485 data
- PLD between UART and RS485 permits variety of interfaces
- I/O provided via 68 pin SCSI connector on front panel
- Rear I/O provided by wiring all ports to the P4 connector

Each port is independently set-up to operate at either RS232 or RS422 levels. In the RS422 case, an additional option is provided to transmit data on the receive data line in an RS485 fashion. Please specify your port configuration when ordering.
When configured for RS232 mode, a port provides the full set of data and modem control lines — RTS, CTS, TXD, RXD, DCD, DTR, DSR, and RI.

When configured for RS422 mode, a port provides TXD, RXD, CTS, and RTS, each operating at RS422 differential levels with uni-directional drive.

The RS485 mode supports both 2-wire and 4-wire RS485 connections. In 2-wire mode, a single differential

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760 Veterans Circle Warminster, PA 18974 Tel (215) 956-1200 Fax (215) 956-1201

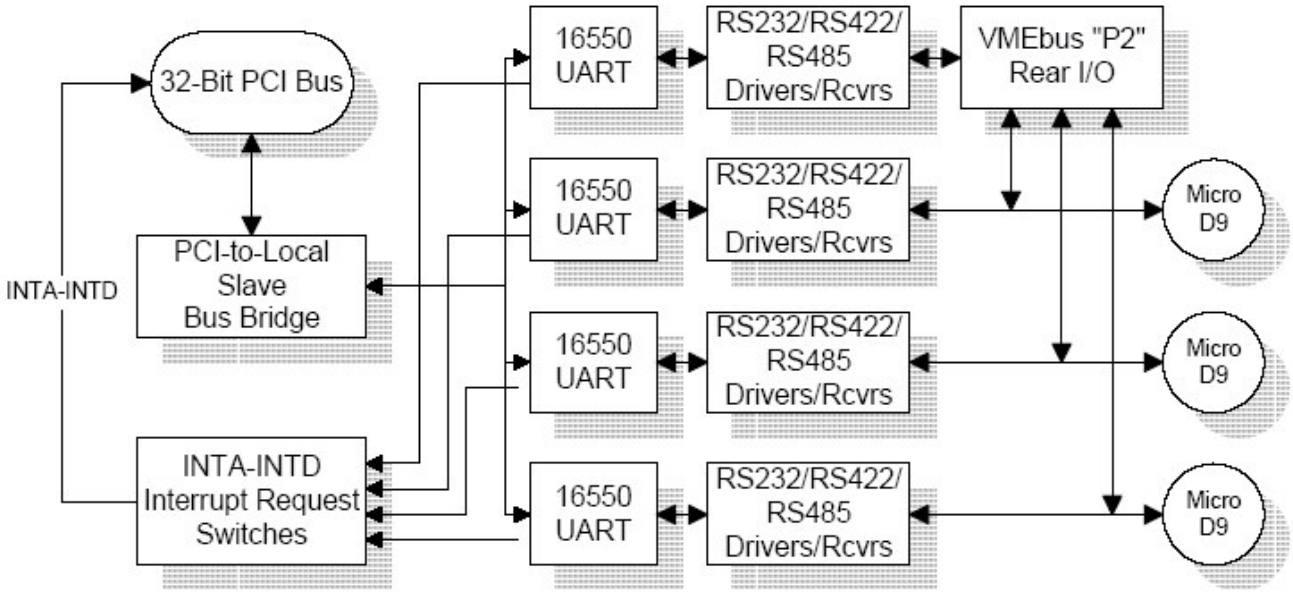
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RS422 driven pair carries transmit or receive data in a half-duplex fashion. For 4-wire mode, the TXD is also driven on an additional RS422 uni-directional output. Control of transmit/receive direction is accomplished via the RTS control signal from the 16650 UART, as is customarily done for RS485 applications.

Options to terminate the differential RS422/RS485 signals with 150 ohm parallel termination are provided by the design. Please specify your termination requirements on order.

Three of the four ports are accessed via 9-pin “Micro”D-Subminiature connectors on the PMC front panel. All four ports are also available out the rear-I/O connector on the PMC, and are available out the P2 VMEbus connector for host processors which support rear- I/O connectivity. The P2 pinning is defined so that an IDC terminated Ribbon cable is broken out to four individual 9-pin Standard D-Subminiature connectors for rear-I/O connection. Switches on the board direct the interrupts from each port to the desired INTA/INTB/INTC/INTD request on the PCI bus. Any combination of connection to the INTx lines is possible, thereby supporting shared and non-shared interrupt requests.

Industry standard 16550 UARTS operating up to 115Kbaud are used in this product. 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 theports.



Technical Data

Power

+5 Volt, 3.3V or 5V PCI signaling environment

Environmental

	Operating	Storage/Transit
Temperature:	+5° C to +50° C	–20° C to +60° C
Humidity (NC):	5% to 90% @ 40° C	

ElectromagneticCompatibility(EMC)

Intended for use in systems meeting the following regulations:
U.S.: FCC Part 15, Subpart B, Class A (non-residential)
Canada: ICES-003, Class A (non-residential)

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