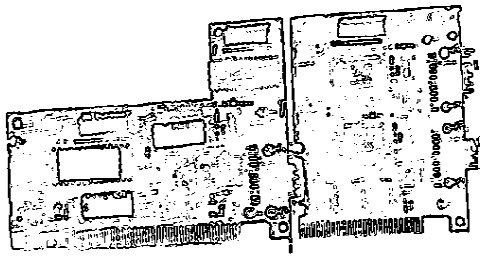


Intelligent Serial Interface™



Models and Description:

- ISI551 - Single-port card that emulates a 16550 UART and provides 32K bytes of RAM for data rates up to 115.2K bps.
- ISI552 - Dual-port card that emulates 16550 UARTs and provides 32K bytes of RAM for data rates up to 115.2K bps per port.

General Description:

Serial-port accelerator cards for data integrity during high-speed file transfers.

An Intelligent Serial Interface™, or ISI, is an expansion card that adds fast serial ports to single-user computers or small-scale modem servers. The ISI551 is a single-port serial expansion card; the ISI552 is a dual-port model. Both have their own communication processor and 32K bytes of RAM for buffering serial port data.

The ISI551 and ISI552 ports respond to communication software like 16550 COM ports (so there's compatibility issues or driver to install), but they perform with greater speed and reliability. Each port on the ISIs can reliably handle data at speeds up to 115.2K bps (the data rate necessary to optimize V.34/V.42bis modem technology), even in a multitasking Windows™ environment.

The ISI's onboard processor handles serial port activity (offloading this burden from the PC's processor) and emulates a 16550 UART on each port, so communication software can recognize the ISI ports as it would a traditional COM port. Each port on the ISI551 and ISI552 cards may be configured to take the place of a system COM port (e.g., COM 1-8) or, using the extended addressing feature, may be configured to use a unique base address and interrupt request vector (IRQ).

The ISIs buffering incoming data results in two benefits. First, since the ISI ports move data from the serial connector to the buffer, incoming data does not overwrite data waiting to be gathered by the processor. Second, an ISI port transmits incoming data from the buffer to the processor in sixteen-character blocks, which means it interrupts the processor far less often than traditional COM ports do for the same amount of data.

For additional serial connections, a maximum of four ISI551s or ISI552s (any combination) may be added to a system for a maximum of eight ports per PC or modem server.

Features:

Fast throughputs, Transparent operation, Two to eight ports, Extended addressing, Buffering, & Communication processing.

Fast, Reliable Data Rates

- Each port handles data at speeds up to 115.2K bps per port.

Transparent Operation

- Transparent operation as one or two 16550 COM port(s) ensures compatibility with communication software.

Expandability

- Installing any combination of up to four ISI551s or ISI552s to a PC or modem server provides four to eight high-speed serial ports.

Extended Addressing

- Extended addressing allows the user to select a single address and IRQ value for each port, providing greater installation flexibility.

Data Buffering

- 32K bytes of RAM are dynamically allocated according to port activity. This buffering ensures reliable throughputs at speeds up to 115.2K bps for file transfers.

Communication Processing

- Incoming data is buffered and sent to the system processor in sixteen-character blocks. Traditional COM ports interrupt the processor on a character-by-character basis.

Specifications:

Computer Requirements
286-, 386-, 486-based PC, or
compatible with 16-bit bus structure.

Dimensions:

ISI551: 4.95" x 2.38" x .06"
12.57 cm x 6.00 cm x .16 cm

ISI552: 4.95" x 4.20" x .06"
12.57 cm x 10.67 cm x .16 cm

Baud Rates: 300, 600, 1200, 2400, 4800, 7200,
9600, 19.2K, 38.4K, 57.6K, 76.8K,
115.2K bps per port

Bus Type: ISA or EISA

Connectors: One DB-9 on ISI551
Two DB-9s on ISI552

Interface: RS232C or RS232D

Temp Range: 0° to 50°C (32° to 120°F)

Power Consumption:

750 mAmps @ +5 V
100 mAmps @ +12 V
100 mAmps @ -12 V

Base I/O Address: One address per port. Valid options range from 100h to 3F8h (DIP-switch setting)

Interrupt Request: One IRQ per port. Valid options include 2, 3, 4, 5, 7, 10, 11, 12, & 15 (Jumper setting)

Limited Warranty: Two years

Manufactured in Mounds View, MN, U.S.A.

The ISI551 and ISI552 are also mentioned in the Communication Servers and UNIX® Connectivity family brochures.

MultiTech® Systems

The right answer every time.

Multi-Tech Systems, Inc.
2205 Woodale Drive
Mounds View, MN 55112
United States
TEL: (612) 785-3500 or
(800) 328-9717
FAX: (612) 785-9874
BBS: (612) 785-3702 or
(800) 392-2432
Tech Support (800) 972-2439

Multi-Tech Computers (U.K.) Ltd.
Gibbs House, Kennel Ride
Ascot, Berks SL5 7NT
United Kingdom
TEL: +(44) 1344-891266
FAX: +(44) 1344-891215
BBS: +(44) 1344-891158

Multi-Tech Systems, Inc., has international offices in France, Germany, India, Mexico, the Netherlands, and the United Kingdom. For more information, contact Multi-Tech world headquarters at (800) 328-9717 or (612) 785-3500.

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Windows: Microsoft Corporation.
UNIX: X/Open Co., Ltd.

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