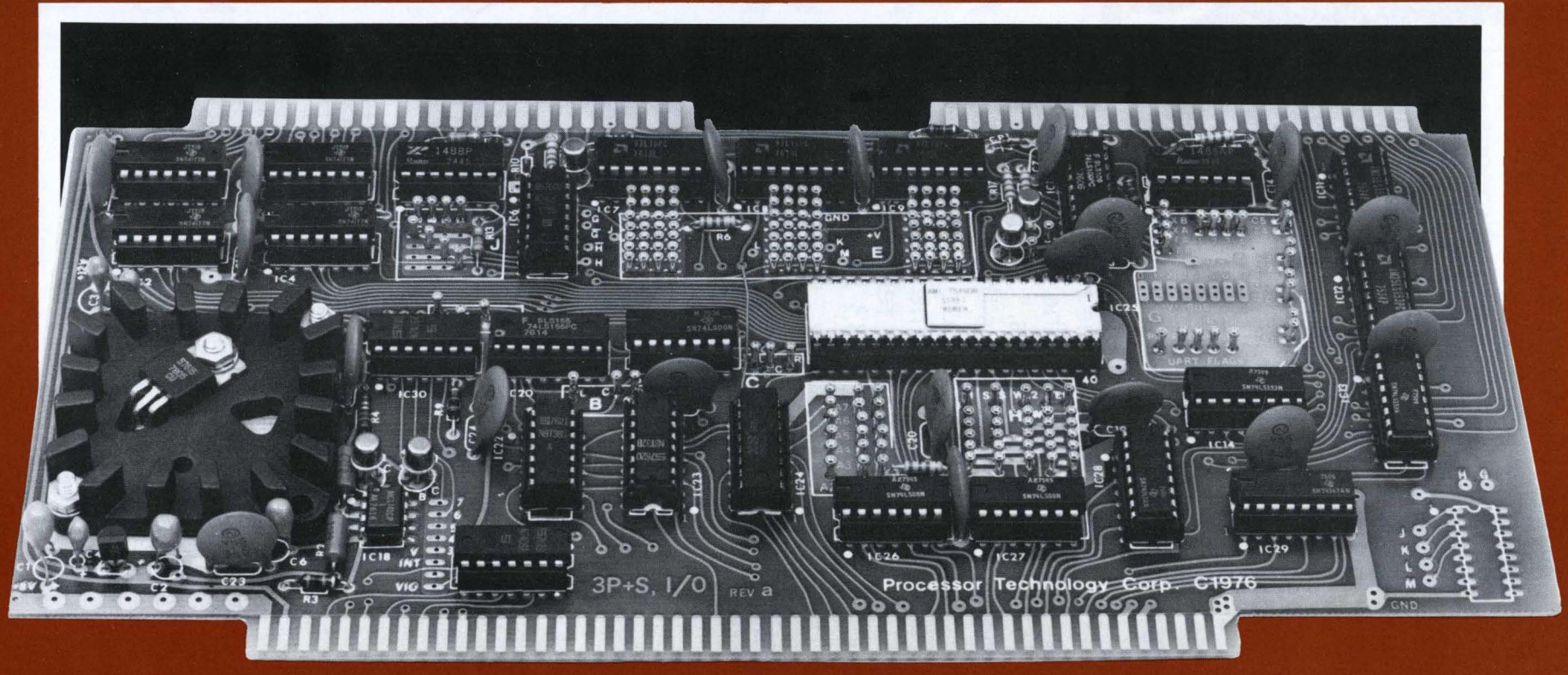

Interfacing Versatility

A versatile card that can probably handle all the input/output needs of your 8800 system. A simple and inexpensive solution to getting computer data to and from peripheral devices.

3P+S Input Output Module

Processor Technology Corporation
Emeryville, CA 94608

The 3P+S has **two 8-bit parallel I/O ports,** with full handshaking logic, plus **a serial I/O port** with a data rate that can be set anywhere between 35 and 9600 Baud.

One parallel output port can be used to set up control conditions for both parallel and serial ports, as well as for setting the serial I/O baud rate under program control. One parallel input port is available for polling Input Data flags and External Device flags, and for checking the serial I/O error flags. These provisions can implement full handshaking with both input and output peripherals.

Interfacing to the Sol System, Altair 8800, or IMSAI 8080 vectored interrupt bus is provided by a jumper selectable option which allows any of the UART (Universal Asynchronous Receiver Transmitter) error flags or handshaking signals to generate interrupts. (A Vectored Interrupt Module is required for this process.)

Addressing of the module is selectable to any of 64 four-address segments within the range of 256 I/O addresses. Add another dimension of flexibility by using either the UART and control port, or the two parallel ports, to occupy the lower two relative addresses.

The 3P+S is the only module that will allow 1.5 stop bits, required by the old (and less expensive) model teletypes, such as the 15, 28, or 33 TTY's.

Specifications:

Outputs: Two 8-bit parallel ports, standard TTL levels, relative addresses at 0 & 1, or 2 & 3.

One Teletype 20mA current loop output.

Four EIA RS-232C outputs for serial transmit data and/or control signals.

One peripheral Interface Control driver (PIC) 50mA current source for paper tape reader control or cassette recorder control. Jumper selectable to control port output.

Inputs: Two 8-bit parallel ports, standard TTL voltage levels, input current is 0.36mA maximum.

One Teletype 20mA current loop receiver for UART data input.

Four EIA RS-232C receivers for received serial data and/or control signals.

I/O Control: One 8-bit output port, relative card address selectable as 0 or 2. Lower four bits for baud rate control (35 to 9600 baud) and/or EIA control outputs and/or PIC driver.

Upper four bits for UART control, i.e., word length, parity, and number of stop bits. Control conditions can be strapped on, off or to software controlled, latched output bits.

One 8-bit input port, relative card address selectable as 0 or 2. Bits selectable with jumpers to read UART error flags, i.e., parity, overrun, and framing errors, and/or EIA control inputs, and/or Data Available flags for parallel input ports, and/or External Device Ready flags for parallel output ports.

Interrupt Control: Any control input, status flag, or UART output may be jumpered to the Interrupt Bus Driver. Interrupt operation requires use of a Vectored Interrupt Module to gate the Restart instruction to the processor.

Bus Pinout: Plug-in compatible with Sol System, Altair 8800 and IMSAI 8080 bus.

Edge Contacts: Gold-plated, 100 pins (dual 50) on .125" centers.

Power Requirements: +7.5 to +10VDC at 0.6A typical; +15 to +19VDC at 50mA max.; −15 to −19 VDC at 100mA max.

I/O Connection: Two standard 44 pin (dual 22) edge connectors, .156" centers.

Dimensions: 5.0" x 10.0" (12.7cm x 25.4cm)

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