With the Model 2207A I/O Interface Controller, the following non-Wang equipment can be interfaced directly to the Central Processing Unit (CPU) of a System 2200 configuration:

- an RS-232-C compatible Teletype®, e.g., the Model 33 or 35,
- a Teletype-equivalent terminal, or
- an RS-232-C compatible, asynchronous transmission laboratory instrument.

The controller supports asynchronous transmission rates up to 1200 baud with switch-selectable settings of 110, 150, 300, 600, and 1200 baud. The controller also supports two asynchronous formats: (a) 1 start bit, 7 data bits plus an even parity bit, and 2 stop bits, or (b) 1 start bit, 8 data bits, and 2 stop bits.

Two modes of operation are switch-selectable. With the switch in the "ASCII-Out" position, the normal mode for Teletype terminal input/output or tape read/punch operations is in effect. The data format is 7-level ASCII with an even-parity high-order eighth bit. When data is transferred to the CPU via the interface, the parity bit is stripped from each character (i.e., the high-level bit is always zero). When a standard Teletype BREAK signal is received, the interface automatically decodes the signal and sends a HALT/STEP signal to the CPU. Similarly, when a standard ESC (Escape) character is received, the interface sends a RESET signal to the CPU. Thus, a Teletype plugged into a Model 2207A interface can function as a keyboard input device for a System 2200 configuration.

On the other hand, with the operation mode switch in the "Binary-In" position, the data format is 8-bit for input/output operations. All data bits received by the interface are transferred to the CPU without examination of the parity bit. Decoding of BREAK and ESC characters is inhibited. During an output operation, no parity bit change is made in the data when each character is framed with start/stop bits. This second mode of operation can be used to input discrete binary data to the CPU or to input any 8-bit character set.

The Model 2207A interface plugs into any I/O slot in a CPU chassis and has an RS-232-C compatible female plug to facilitate direct connection of a Teletype or other equipment having a cable and compatible male plug. The interface operates with interchange signals recommended by the Electronics Industries Association in "EIA Standard RS-232-C."

All 2200 Series central processors use Wang's BASIC language for control of I/O and internal operations. In particular, the DATALOAD BT and DATASAVE BT statements are needed to control tape read and punch operations using a Teletype Tape Unit. These statements are standard or available with particular CPU options in every case, except for the System 2200A.
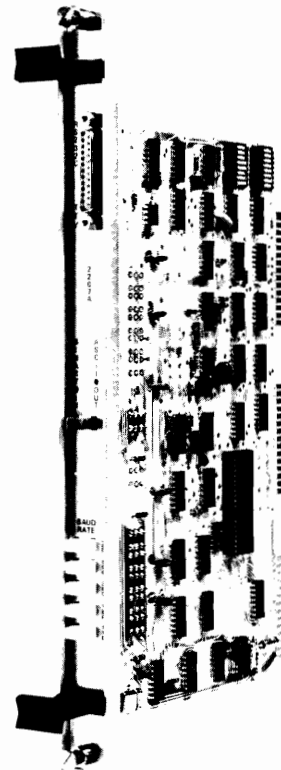
2207A I/O INTERFACE CONTROLLER

DATA SHEET

SPECIFICATIONS

Size of Controller Board
Length . . . . 14 in. (35.56 cm)
Depth . . . . 6 in. (15.24 cm)
Width . . . . 1 in. (2.54 cm)

Electrical Connector
RS-232-C compatible (receives 25-pin RS-232-C Male Plug).

Code Format
(a) 1 start bit, 8 data bits, 2 stop bits, or
(b) 1 start bit, 7 data bits, even parity bit and 2 stop bits.

Transmission Rate
Selectable baud rates of 110, 150, 300, 600, and 1,200, all asynchronous.

Special Features
Decodes Teletype BREAK signal into HALT/STEP command and Teletype ESC (Escape) character into RESET command.

Power Requirements
Supplied by the CPU.

ORDERING SPECIFICATIONS

An RS-232-C compatible Teletype controller board for Wang 2200 Series central processors. The controller must support switch-selectable asynchronous transmission rates of 110, 150, 300, 600, and 1,200 baud with code formats of (a) 1 start bit, 8 data bits, and 2 stop bits, or (b) 1 start bit, 7 data bits plus even parity bit, and 2 stop bits.

Standard Warranty Applies.

Wang Laboratories reserves the right to change specifications without prior notice.

WANG LABORATORIES, INC.