

The Model 2254 IEEE-488 Interface allows a Wang 2200 series system to be compatible with other devices using the IEEE 488-1975 standard.

The interface board plugs into one of the I/O slots in the Central Processing Unit (CPU) of the Wang system and a 24-pin Microribbon or Champ connector, supplied with the board, serves as an input/output connection. Input/output circuits for the Model 2254 interface are TTL/DTL* compatible. Digital information is transferred between systems components in byte serial and bit parallel modes along with BUS control and management information. Devices connected to the interface board may be any one of the following:

- Listeners : Devices receiving information (printers, programmable power supply, etc.)
- Talkers : Devices sending information only (digital meter, counters, etc.)
- Talker/Listeners : Devices sending and receiving information (programmable analyzers, counters, etc.)
- Controllers : Devices controlling information on the BUS (computers, intelligent instruments, etc.)

With the Model 2254 Interface, the 2200 system can serve as either the system controller (controlling, talking or listening) or as a noncontroller (talking or listening). The Model 2254 is designed to operate with all Wang systems which have the \$GIO capability as follows: 2200B or C with Option 2, 2200S with Option 23, 2200T, WCS/20, WCS/30. The \$GIO command is necessary to properly control the Model 2254, however, once protocol is established, other BASIC statements may be used to transfer information.

The 2254 can be wired to operate as a controller or non-controller. It supports the following subset of the IEEE 488-1975 Specification in each mode:

CONTROLLER

- C1 — System Controller
- C2 — Send IFC (Interface Clear)
- C3 — Send REN (Remote Enable)
- C4 — Recognize SRQ (Service Request)
- C25 — Send all standard multi-line interface messages and in addition
 - Send Parallel Poll
 - Send Take Control Synchronously
- SR1 — Process Service Request
- L2 — Basic Listener
- T4 — Basic Talker
- AH1 — Full Acceptor Handshake
- SH1 — Full Source Handshake

*TTL = transistor-transistor logic

DTL = diode-transistor-Logic

MODEL 2254 IEEE-488 INTERFACE

DATA SHEET

NON-CONTROLLER

- CO - System Non-Controller
- PP2 - Respond to Parallel Poll (fixed configuration)
- SR1 - Send Service Request
- L2 - Basic Listener
- T4 - Basic Talker
- AH1 - Full Acceptor Handshake
- SH1 - Full Service Handshake

SPECIFICATIONS

Size

- Height 7 in. (17.8 cm)
- Width 13.5 in. (34.3 cm)
- Depth 1.25 in. (3.2 cm)

Weight

3 lb (1.36 kg)

Power Requirements

Supplied by the CPU

Connector

A 24-pin Microribbon or Champ input/output connector

Number of Devices

15 maximum

BUS Length

20 meters maximum

Signal Levels

- Logic "0" (HIGH \geq 2.0 volts)
- Logic "1" (LOW \leq 0.8 volts)

Signal Definitions**

Data Transfer Control

- DAV Data valid
- NRFD Not ready for data
- NDAC Data not accepted

General Interface Management

- ATN Attention
- IFC Interface clear
- SRQ Service request

SPECIFICATIONS (Cont.)

- REN Remote enable
- EOI End of identify

Data Bus Control

- DIO1 DIO5
- DIO2 DIO6
- DIO3 DIO7
- DIO4 DIO8

Data Transfer Rate

30 k bytes/sec

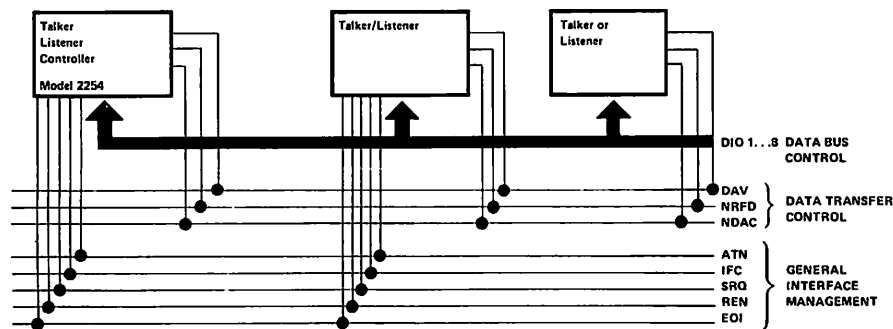
Model 2254 Connector Pin Assignments

Pin Number	Function	Pin Number	Function
1	DIO 1	13	DIO 5
2	DIO 2	14	DIO 6
3	DIO 3	15	DIO 7
4	DIO 4	16	DIO 8
5	EOI	17	REN
6	DAV	18	DAV GND
7	NRFD	19	NRFD GND
8	NDAC	20	NDAC GND
9	IFC	21	IFC GND
10	SRQ	22	SRQ GND
11	ATN	23	ATN GND
12	SHIELD	24	LOGIC GND

ORDERING SPECIFICATIONS

An interface providing information transfer from a Wang System 2200 Series Central Processing Unit to devices that conform to IEEE 488-1975 standard. As a controller the interface must meet subsets: C1, C2, C3, C4, C25, SR1, L2, T4, AH1, and SH1. As a noncontroller the interface must meet subsets: CO, PP2, SR1, L2, T4, AH1, and SH1.

Standard Warranty Applies



**For complete IEEE STD 488-1975 definitions and specifications, refer to: Institute of Electrical Engineers, Inc. publication of 4/4/75, "IEEE Standard Digital Interface for Programmable Instrumentation".



LABORATORIES, INC.

836 NORTH STREET, TEWKSBURY, MASSACHUSETTS 01876, TEL (617) 851-4111, TWX 710 343-6769, TELEX 94-7421

Wang reserves the right to change specifications without prior notice.

Printed in U.S.A.
700-4008
8-76-10M