

HEWLETT  PACKARD



98036A Serial Interface Card

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The HP 98036A Serial Interface provides bit serial communication between the 9825A Desktop Computer and asynchronous EIA RS-232-C devices such as data terminals and modems.

Data rates range from 75 to 9600 bits per second (baud) and are set via an externally accessible rotary switch. Allowable data formats include 5-, 6-, 7-, or 8 bits per character with 1-, 1.5- or 2 stop bits. Information can be sent and received in either EIA RS-232-C voltage specification or 20-mA current loop configuration. Receive-only capability in 60-mA current loop is also possible. Normal input/output operations require the General I/O ROM. The Extended I/O ROM is required for interrupt, buffered input/output operations, and extended RS-232-C control/status capability.

SPECIFICATIONS

Connector Configurations

Two cables are available for use with the 98036A. The standard cable is suitable for connection to data terminal equipment, whereas the optional cable is used for connection to data set equipment.

The standard 98036A cable is terminated with a standard female EIA 25-pin connector with the following signals present. (Note: A ← indicates a signal sent from the device to the 98036A, and a → indicates a signal sent from the 98036A to a device).

98036A STANDARD (Female connector)

Pin No.	Signal Present	Signal Direction
1	Protective ground	↔
2	Transmitted data	←
3	Received data	→
4	Request to send	←
5	Clear to send	→
6	Data set ready	→
7	Signal ground	↔
8	Received line signal detector	→
9	Unused	
10	Unused	
11	Unused	
12	Secondary received line signal detector	→
13	Unused	
14	Unused	
15	Unused	
16	Unused	
17	Unused	
18	Unused	
19	Secondary request to send	←
20	Data terminal ready	←
21	Signal quality detector	→
22	Ring indicator	→
23	Data signal rate selector	←
24	Transmit signal element timing	←
25	Unused	

When Opt. 001 is ordered, the 98036A is shipped with a male connector, terminated as shown in the following:

**98036A OPT. 001
(Male connector)**

Pin No.	Signal Present	Signal Direction
1	Protective ground	↔
2	Transmitted data	→
3	Received data	←
4	Request to send	→
5	Clear to send	←
6	Data set ready	←
7	Signal ground	↔
8	Received line signal detector	←
9	Unused	
10	Unused	
11	Special purpose (controlled by user)	→
12	Secondary received line signal detector	←
13	Unused	
14	Unused	
15	Transmitter signal element timing	←
16	Unused	
17	Receiver signal element timing	←
18	Unused	
19	Secondary request to send	→
20	Data terminal ready	→
21	Unused	
22	Ring indicator	←
23	Data rate selector	→
24	Unused	
25	Special test	→

Interface Configuration

All signals present at the connector conform electrically to EIA RS-232-C and CCITT V.24 specifications. The interface operates in an asynchronous mode, providing 5-, 6-, 7-, or 8-bit data formatting with 1-, 1.5-, or 2 stop bits and odd, even, or no parity.

Additionally, the interface will detect framing errors (invalid stop bit), parity errors, and overrun errors—these errors will be indicated in a status word.

Data rates available are 75, 110, 150, 300, 600, 1200, 1800, 2400, 4800, and 9600 baud. Data rate selection is via an externally accessible rotary switch. Under programmable control of the 9825A, the switch selected data rate can be reduced to one half of its set value.

Additional Operating Information

The transmitter and receiver sections of the 98036A have a separate 1-character buffer. The status of these buffers can be interrogated by the 9825A.

Additionally, the interface can be programmed by the 9825A to interrupt when either the input buffer is full or the output buffer is empty. This interrupt capability allows the interface to operate in a full duplex fashion in that information can be input under interrupt control while information is being output by standard 9825A write commands. The Extended I/O ROM is required to operate under interrupt control.

Select Code Setting

Any of the 14 possible select codes may be chosen via an externally accessible rotary switch. Select codes 2-7 have low interrupt priority; select codes 8-15 have high priority.

The Extended I/O ROM is required for interrupt control.

Options

The standard 98036A is shipped with a 2-m (6.5-ft) cable terminated with a standard EIA 25-pin female connector. If Opt. 001 is ordered, the cable is terminated with a male connector.

A 98241-67936 Test Connector is supplied with each 98036A Interface.

PHYSICAL SPECIFICATIONS

Temperature range:	0°C to 55°C ambient
Power:	supplied by the 9825A
Size	
Height:	163 mm (6.4 in.)
Width:	89 mm (3.5 in.)
Depth:	38 mm (1.5 in.)
Net weight:	0.65 kg (1lb 14 oz)
Shipping weight:	2,3 kg (5 lb)

PURCHASE PLANS

Contact one of the Hewlett-Packard worldwide sales and service offices for specific prices and plans in your area.

*Data subject to change.

