



HP 82949A Printer Interface

## Printer Interface

With the HP 82949A Printer Interface your Series 80 computer can drive printers having a standard parallel Centronics-type interface. This output-only interface consists of a plug-in module which is inserted into any of the rear ports of a Series 80 personal computer and a captive cable which is terminated by a standard Amphenol-type, 36-pin connector. A Centronics-type printer interface is built into the HP-86A; HP-IB is built into the HP-86B and HP-87XM.

## Specifications

### EQUIPMENT REQUIRED (for HP-85)

- 00085-15002 Plotter/Printer ROM or 00085-15003 I/O ROM (already built into HP-85B Opt. 001-007)

### CONTROL AND STATUS REGISTERS

The HP 82949A has ten control registers, three status registers, and one combined control/status register (register 3). Addressable control registers include enable and disable for printer fault interrupt, out-of-paper indica-

tor, and select state interrupt, plus printer reset and handshake normalization. The status registers include interface identification, interrupt cause, and printer status registers.

### ADDRESSING

The Plotter/Printer ROM provides the ability to specify the peripheral printer as the destination device for all PRINT output and also allows certain formatting instructions to be programmed into the Printer Interface. The SET I/O statement enables the user to write to any of the ten control registers, registers 1, 2, and 16 through 23, and also to the control/status register 3.

With the HP-86 and HP-87, these capabilities are built in, so a ROM is not required for printing applications.

The CONTROL, ASSERT, and ENABLE INTR statements provided by the I/O ROM allow access to the interface control registers. The STATUS statement accesses status registers 1 and 2 (and control/status register 3). With the I/O ROM, the interface is capable of implementing a number of I/O operations consistent with its output-only, full handshake function. The I/O ROM cannot control the page width of the printer.

## ELECTRICAL CHARACTERISTICS

### Electrical Characteristics for Acknowledge, Out of Paper, Select, Fault Lines

Parameter	Min.	Max.	Units
Input Low Voltage	0.0	0.8	V
Input High Voltage	2.0	5.0	V
Input Low Current		0.4	mA

### Electrical Characteristics for Strobe, Input Prime Lines

Parameter	Min.	Max.	Units
Output Low Voltage @ 16 mA		0.4	V
Output High Voltage @ -400 $\mu$ A	2.4		V
Output Low Current		16	mA
Output High Current	-400		$\mu$ A

### Electrical Characteristics for Data 1-8 Lines

Parameter	Min.	Max.	Units
Output Low Voltage @ 24 mA		0.5	V
Output High Voltage @ -15 $\mu$ A	2.0		V
Output Low Current		24	mA
Output High Current	-15		mA

## Customer Support

Services available:

- HP Dealer Repair Center (check with dealer for availability)
- On-site service at your location
- HP Field Repair Center
- Phone-in support
- User newsletter

## Ordering Information

HP part numbers are given below. Each interface comes with an Owner's Manual and the interface itself, as well as the items listed.

- HP 82938A HP-IL Interface  
-Interface connected to a 1-m (3.3-ft) cable (additional cables to link multiple peripherals can be purchased separately)
- HP 82937A HP-IB Interface  
-Interface connected to a 2-m (6.6-ft) cable (additional cables to link multiple peripherals can be purchased separately)
- HP 82169A HP-IL/HP-IB Interface  
-HP 82059B AC Adapter  
-HP 82167A HP-IL Cable
- HP 82939A Serial (RS-232C) Interface  
-2-m (6.6-ft) interface cable terminated with the standard RS-232C female (DCE) connector
- HP 82939A Opt. 001 Serial (RS-232C) Interface  
-2-m (6.6-ft) interface cable terminated with an RS-232C male (DTE) connector
- HP 829239A Opt. 002 Serial (RS-232C) Interface  
-4-m (13.1-ft) unterminated interface cable for current loop operation
- HP 82940A GPIO (Parallel) Interface
- HP 82941A BCD (Binary Coded Decimal) Interface
- HP 82966A Data Link Interface
- HP 82949A Printer Interface