
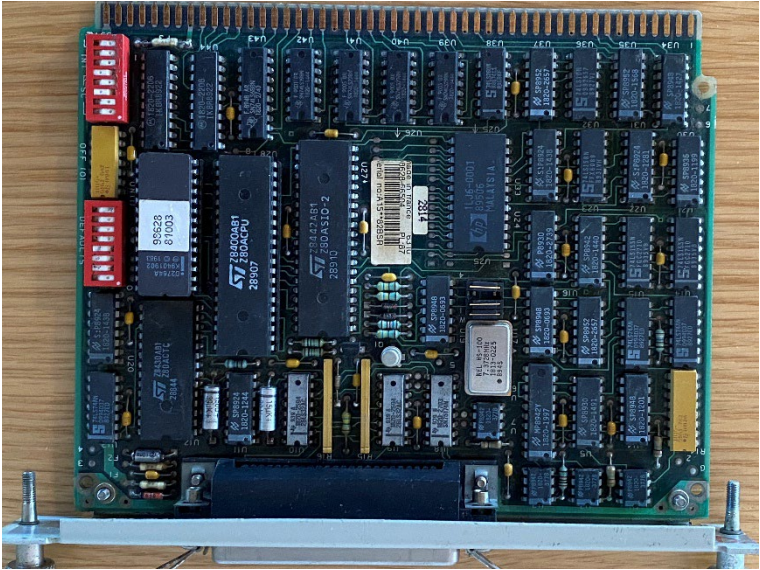



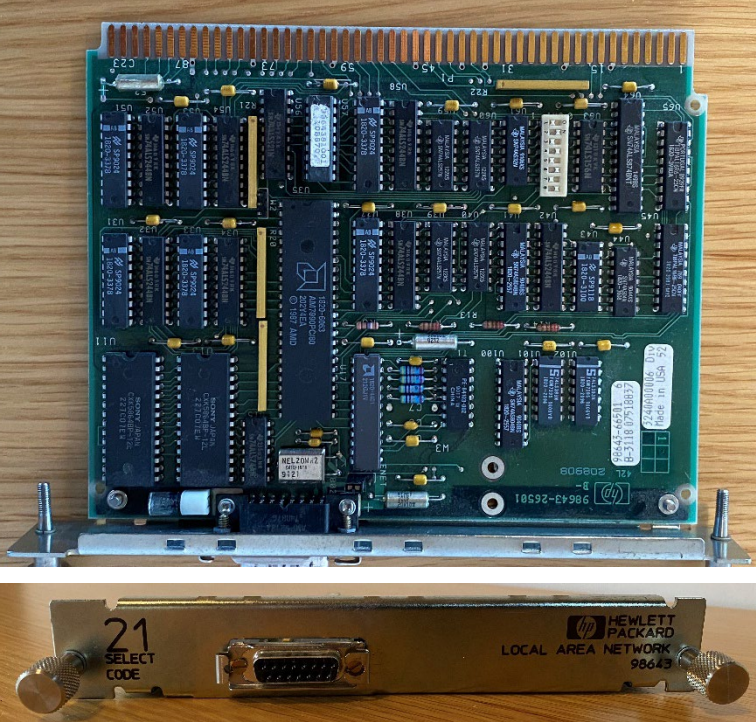
Series 300 Interface Cards

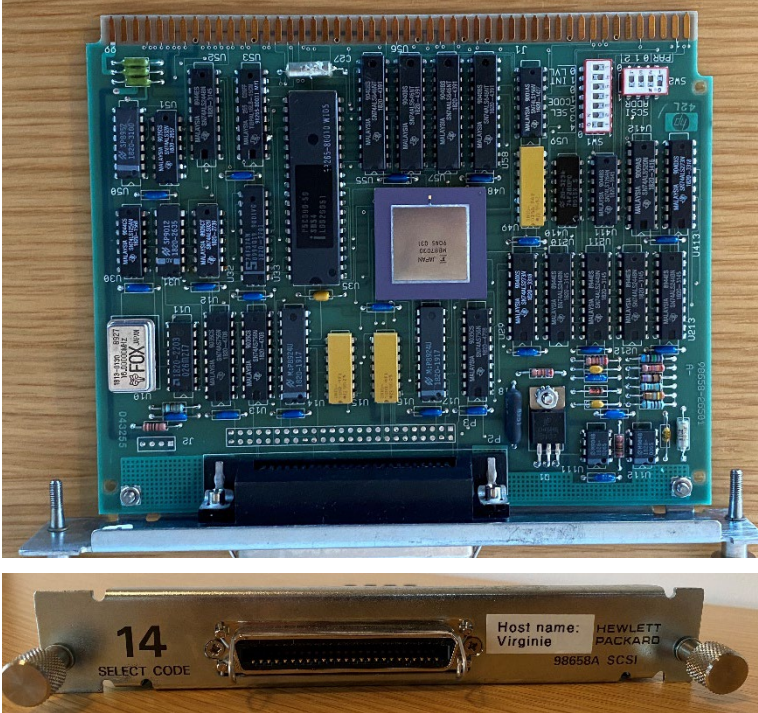
This list details plug-in interface cards (not memory boards) that could be used in 300-series machines. All were DIO-I form factor unless noted otherwise.

Part number	Interface type	Description
98622A	GPIO	General-purpose 16-bit parallel interface with hardware handshaking and DMA capability for burst mode data rates of up to 770 Kbytes/s. The bus used TTL signal levels. All signal lines were available via a 50-pin female Centronics connector.
98623A	BCD	Parallel binary-coded decimal interface providing a signed 8 digit mantissa and a signed 2 digit exponent plus function, overload and control signals. A 64-pin female connector was used. The interface was used mainly with older instruments that provided a BCD output and was supported under Basic only.
98624A	HP-IB	Implements the HP-IB interface standard (IEEE 488-1978) and was functionally identical to the built-in HP-IB interface in series 300 machines. The card will utilise DMA if available. <div data-bbox="608 1010 1370 1722" data-label="Image"> </div>
98625A	HP-IB Disc	High-speed version of the 98624A for use in models 330 and later with built-in DMA capability.
98625B	HP-IB Disc	High-speed versions of the 98624A for use in models 310 and 320 only. Installation of an optional 98620B DMA card was recommended.
98626A	Serial	This was the predecessor of the 98644A serial interface board, providing all of the functionality of the latter plus additional

		optional driver and receiver lines. All signal lines were available via a 50-pin female Centronics connector, which also supplied bus power at -12, +5 and +12 V.
98627A	Colour Output	<p>DIO RGB interface board developed for series 200 computers. Capable of operation at either 15.75 kHz (NTSC standard) or 24.8 kHz horizontal scan rate. Resolution of 512 pixels (horizontal) x either 390 or 512 pixels (vertical) at vertical scan rates of 50 or 60 Hz.</p> 
98628A	Datacomm	<p>Buffered serial data communication over RS-232, RS-422 or RS-423 links. Supported both standard asynchronous communication and Distributed Systems Network/Data Link for connection to HP 1000 and 3000 computers. An onboard Z-80A microprocessor managed data flow. Standard baud rates went up to 19.2K, while an external clock signal could be used to run RS-422/423 links at higher data rates. In asynchronous mode, both hardware and software flow control were possible. All signal lines were available via a 50-pin female Centronics connector, which also supplied bus power at -12, +5 and +12 V.</p>  
98629A	SRM	This board, physically almost identical to the 98626A, allowed series 200 and 300 workstations to be interfaced to an SRM network. As with the 98628A, a 50-pin female Centronics connector was provided allowing direct connection to an SRM server in the original radial SRM topography. Addition of an HP

		50961 SRM Coax Adapter permitted connection to a coaxial SRM network.
98633A	Multi-programmer	Interface to the HP 6944A Multiprogrammer mainframe.
98638A	Asynchronous 8-channel multiplexer	This interface, code name Carmen, comprised a DIO-II multiplexer card (MUX) and an external Active Distribution Panel (ADP) providing either up to 8 RS-232 ports or up to 8 RS-422 ports. A Z-80A CPU controlled bus operations. Baud rates up to 19.2K were supported in half or full duplex mode with hardware or software flow control. On-board buffers were used for both receive and transmit. The MUX had to be installed in a Backplane Expander Unit (HP 98568A or HP 98570A) and was connected to the ADP via a cable with 9-pin sub D connectors. This interface supported under HP-UX only (minimum version 6.5).
98641A	Datacom RJE	A variant of the 98628A Datacom interface allowing the series 300 machine to appear as an IBM 2780 or 3780 Remote Job Entry Station for IBM 360/370 mainframes. Communication was CCITT V.35 compatible at baud rates of up to 56K. As with other cards based on the 98628A, a Z-80A CPU controlled bus operations. Supported under HP-UX only.
98642A	Asynchronous 4-channel multiplexer	This interface, code name Fordyce, provided 4 asynchronous RS-232 ports. A Z-80A CPU controlled bus operations and baud rates up to 19.2K were supported. Three of the ports provided 3-wire connections (via RJ-11 sockets) without flow control, while the fourth provided full hardware handshaking lines (via a 25-pin female D connector. This interface supported under HP-UX only (minimum version 5.0).
98643A	LAN	Local area network interface controller (LANIC) for interfacing series 200 and 300 computers to an IEEE 802.3 or Ethernet network. The card provided a 15-way AUI socket and required a Media Attachment Unit (MAU) to connect to 10Base2 ('thin' coax), 10base5 ('thick' coax) or 10baseT (twisted pair) cabling. This card uses the AMD Am7990 Local Area Network Controller for Ethernet (LANCE) with 16 Kbytes of on board RAM. Data rates up to 10 Mbit/s were supported. The built-in LAN interfaces provided on later series 300 machines were functionally very similar to the 98643A LAN board.

		
98644A	Serial	<p>Provided basis unbuffered asynchronous serial communication over an RS-232 link at data rates of up to 19.2K baud with hardware flow control (DTR/DCR and RTS/CTS). Software flow control was not implemented. The 98644A card replaced the earlier 98626A serial interface board. All signal lines were available via a standard RS-232 25-pin female connector. The functionality of the 98644A serial interface was also implemented on many series-300 system boards.</p>
98658A	SCSI	<p>Provided a Small Computer Systems Interface (SCSI) for connection of up to 7 SCSI-1 mass storage devices. It was capable of both asynchronous and synchronous transfers with DMA. This was a single-ended SCSI controller with a 50-pin female Centronics connector and was functionally identical to the built-in SCSI controllers on later series 300 machines.</p>

		
98691A	Programmable Datacomm	The physical interface board is HP 98628A Opt. 710, a version of the 98628A Datacomm interface board. This was supplied with the HP 98690A Development Package, used to generate microcode for the Z-80A CPU. This enabled customised serial communications at up to 57K baud (asynchronous) or 460K baud (synchronous).
98695A	Coax	Coaxial interface to IBM 3270 controller. Supported in Basic and Pascal but required low-level programming.