HP E2445A

User-Definable Interface

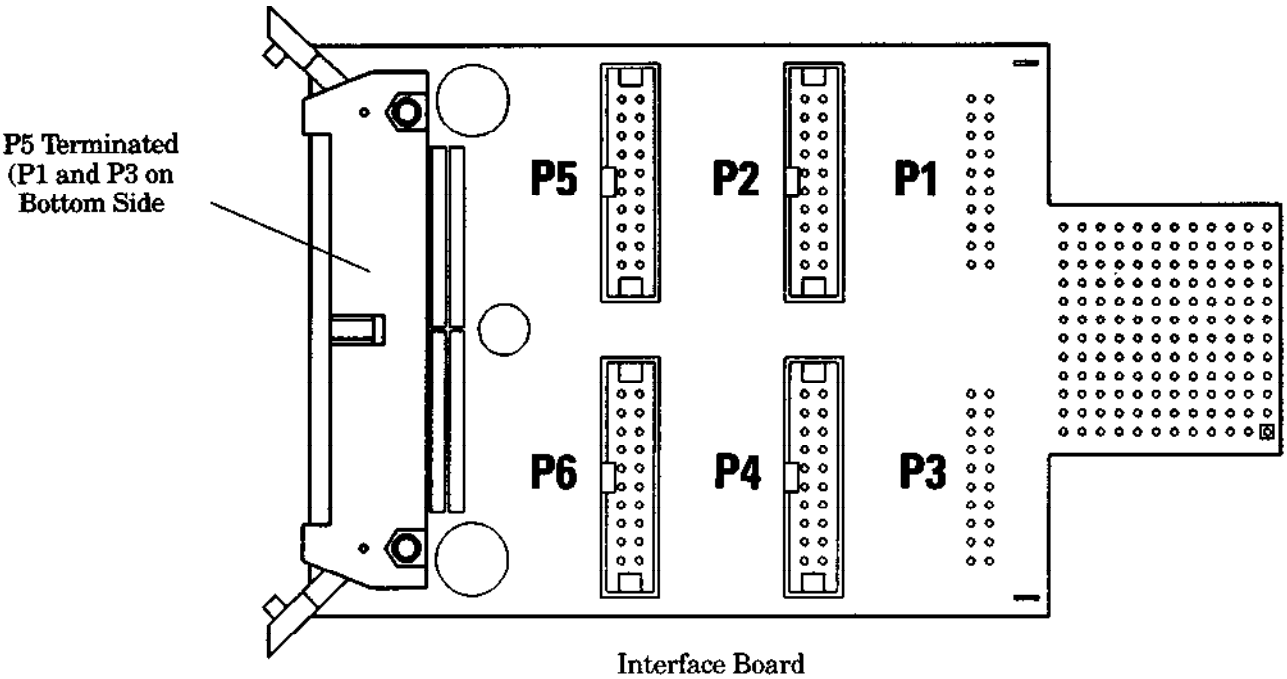
For use with
HP logic analyzers

The Hewlett-Packard E2445A User-Definable Interface provides the basic equipment required to create a custom interface between a wide variety of target systems and Hewlett-Packard logic analyzers. With this product, a user can quickly design and build an interface which will utilize the full data acquisition and analysis capabilities of the HP logic analyzers. The HP E2445A is primarily designed to support analysis of 8-bit and 16-bit microprocessors, and bus systems using 96 signals or less.

Additional connectors are provided so that 48 of the 96 signals can be double-probed. The HP 10269C General Purpose Probe Adapter is NOT required to use the E2445A.

The E2445A consists of a wire-wrap board, which provides space for target system interface connectors and any required interface circuitry, and an interface board, which connects to the logic analyzer. The E2445A can be connected to target systems in several ways. It can be connected directly by 40-pin ribbon cables.

Most PGA-style microprocessors with a footprint less than 12X12 grid can be used with the appropriate adapters. Several adapters will connect to QFP-style target systems. There are also optional probe cables that can be used to probe dual-in-line (DIP) style packages. Limited power for the interface can be obtained directly from the logic analyzer.



Interface Board

Key Specifications

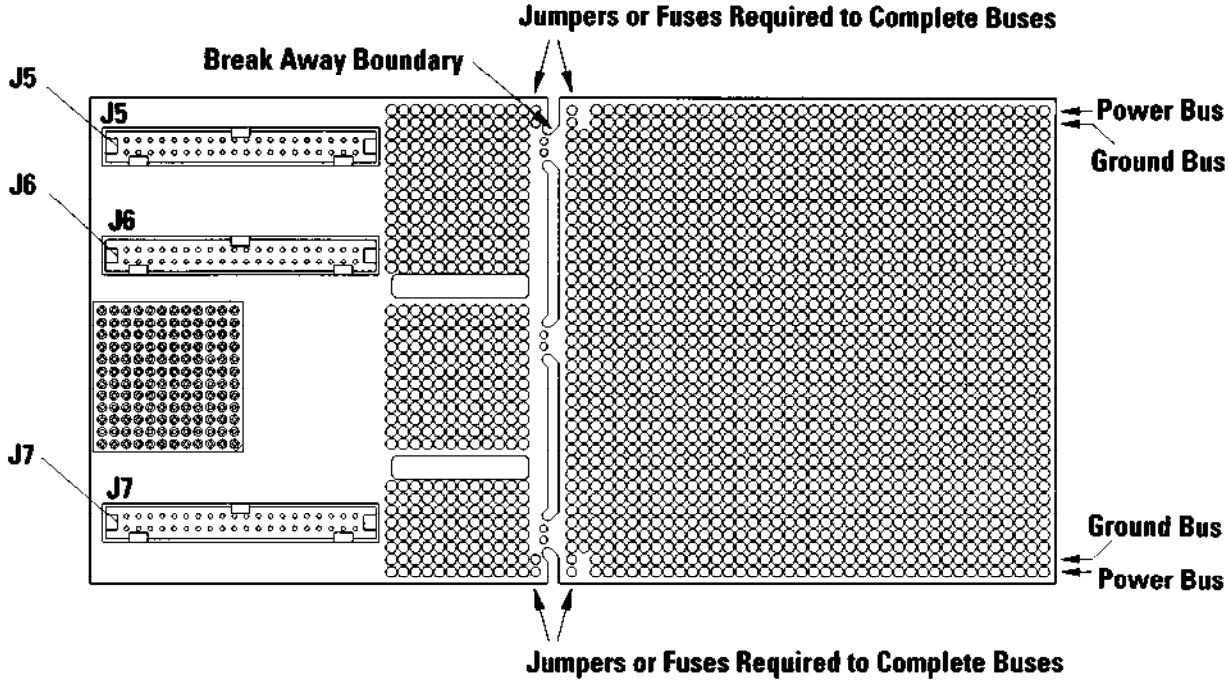
Microprocessor Compatibility:
Any microprocessor that has a total number of data, address and status lines equal to or less than 96 should be able to be analyzed with the E2445A. Bus speed is limited to the maximum bus speed of the analyzer being used.

Maximum Signal Input:
± 40 V maximum. Threshold ranges vary, depending on the HP logic analyzer used.

Data Sampling Modes:

- **State per bus or state per clock modes** - adequate space is provided for the user to include sufficient active and passive circuitry to generate the appropriate clock for state analysis measurements.

- **Timing mode** - A total of 96 signals may be monitored by a timing analyzer. 1 GHz Timing termination adapters are required for this mode (see Optional Accessories below).



Wire-Wrap Board

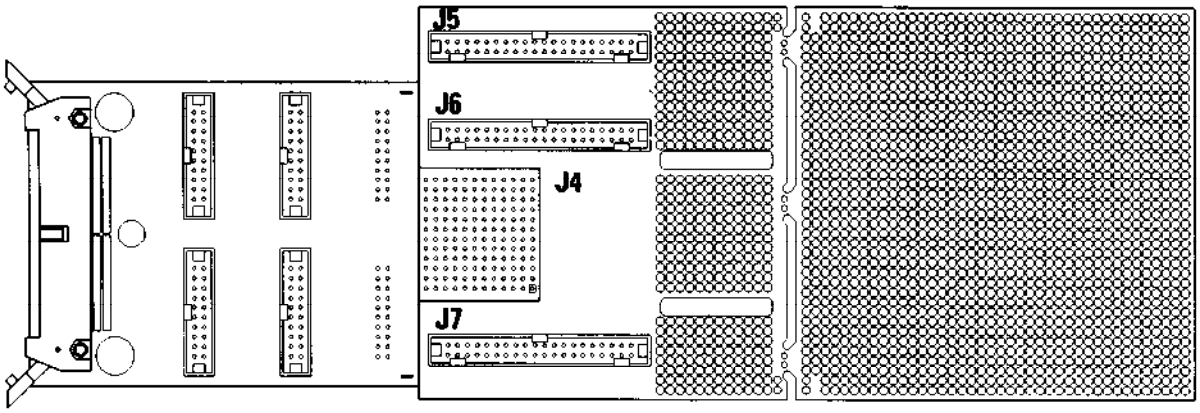
Inverse Assembler Features:
No inverse assembler is provided. The optional HP 10391B Inverse Assembler Development software product may be purchased separately.

Optional Accessories:
HP 10321A - Hardware Interface Parts Kit
HP 10322A - 40 pin DIP Interface cable Kit
HP 10323A - 48 pin DIP Interface cable Kit
HP 10324A - 64 pin DIP Interface cable Kit
HP 10391B - Inverse Assembler Development software package
HP 01650-63203 - 100 KOhm Termination Adapter
HP 16515-63202 - 1 GHz Timing Termination Adapter for use with HP 16515A/16516A
HP E3417A - General Purpose 132-pin QFP Probe Adapter
3M 3303-0000 - Basic Breadboard Kit, with sockets and insertion tools

Logic Analyzers Supported:
HP 1650-series, HP 16510B, HP 16511B, HP 16540/41[A-D], HP 16542A, HP16550A, HP1660-series

Number of Probes Required:
Up to six sixteen-channel probes can be used with the E2445A.

Termination Adapters Required:
Three of the connectors are terminated on the pod. Six additional connectors are unterminated; 1GHz Timing termination adapters (HP 16515-63202) may be purchased separately if needed.



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Technical information in this document is subject to change without notice.

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