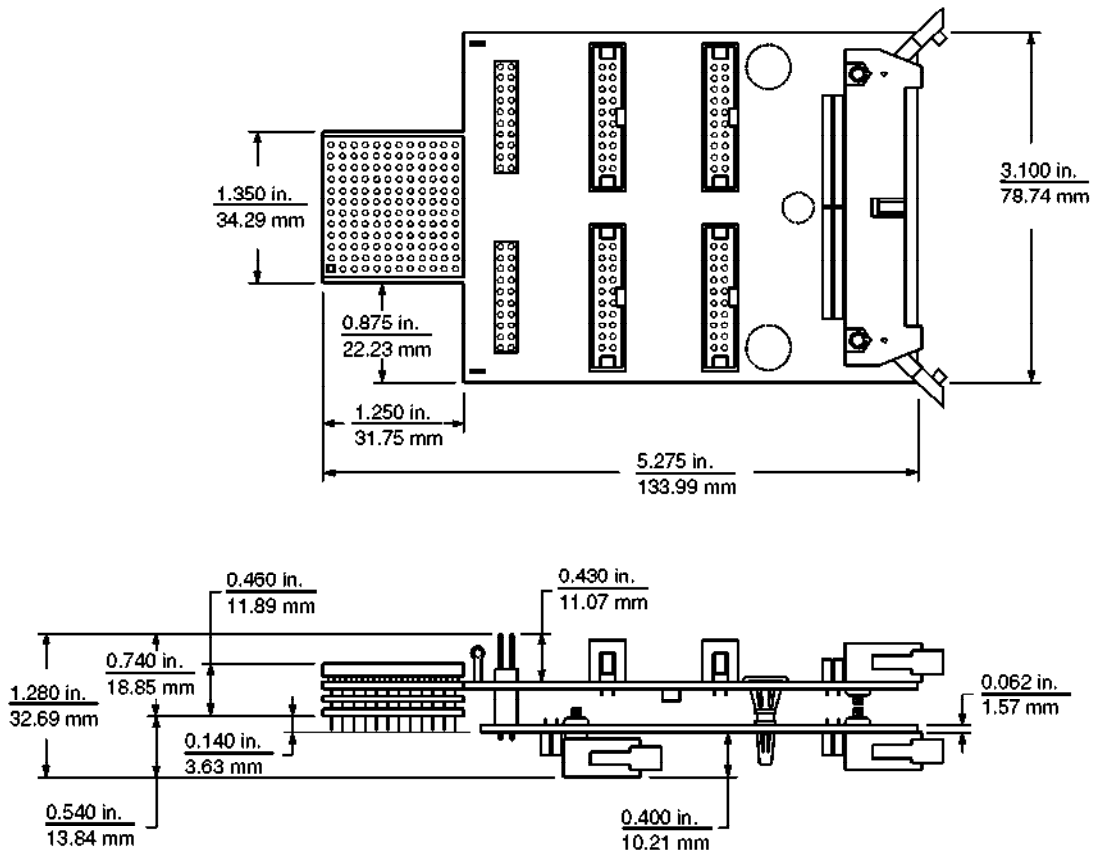# HP E2456A

Motorola 68306
Preprocessor Interface

For use with
HP logic analyzers

The Hewlett-Packard E2456A preprocessor interface provides an easy way to connect a Hewlett-Packard logic analyzer to a target system using the Motorola 68306 microprocessor. All necessary clocks are passed through by the preprocessor to the logic analyzer, ensuring that data is captured at the correct time. Software is shipped with the product that automatically configures the logic analyzer, generating labels for address, data, and status signals. Included with the software is a disassembler that displays execution traces in 68306 microprocessor mnemonics. Instructions that are pre-fetched, but not executed, are marked in the trace display.

Key Specifications

Timing Analysis support:
The preprocessor provides unbuffered timing analysis for all signals.

Parametric Measurements:
The preprocessor provides probing points to take parametric measurements.

Pods:
Each preprocessor has three connectors available for state analysis and six for timing analysis. For disassembly three logic analyzer pods must be used. All signals used in disassembly can be double probed for state and timing analysis. Seven pods would allow timing measurements of all processor signals.

Termination Adapters (TAs):
None are required for state analysis as the connectors are terminated on the preprocessor. For timing analysis one TA (part number 01650-63203) is required per pod.

Logic Analyzers Supported:
HP 1650B, 1652B, 1654B, 1660A, 1661A, 1662A, 16510B, 16511B, 16540 and 16541 (A & D models), 16542A, 16550A, 16555A

E2456A for the Motorola 68306 Microprocessor
Processors Supported:
68306 132-pin PQFP through 16.67 MHz.

Adapter Needed:
The 132-pin PGA-PQFP (E3417A) adapter is required for the HP E2456A to probe the 132-pin PQFP version of the 68306.

Signal Line Loading:
10 pF on EXTAL and XTAL. 20 pF in parallel with 100 kΩ on all other signals.