

## HP E2413C

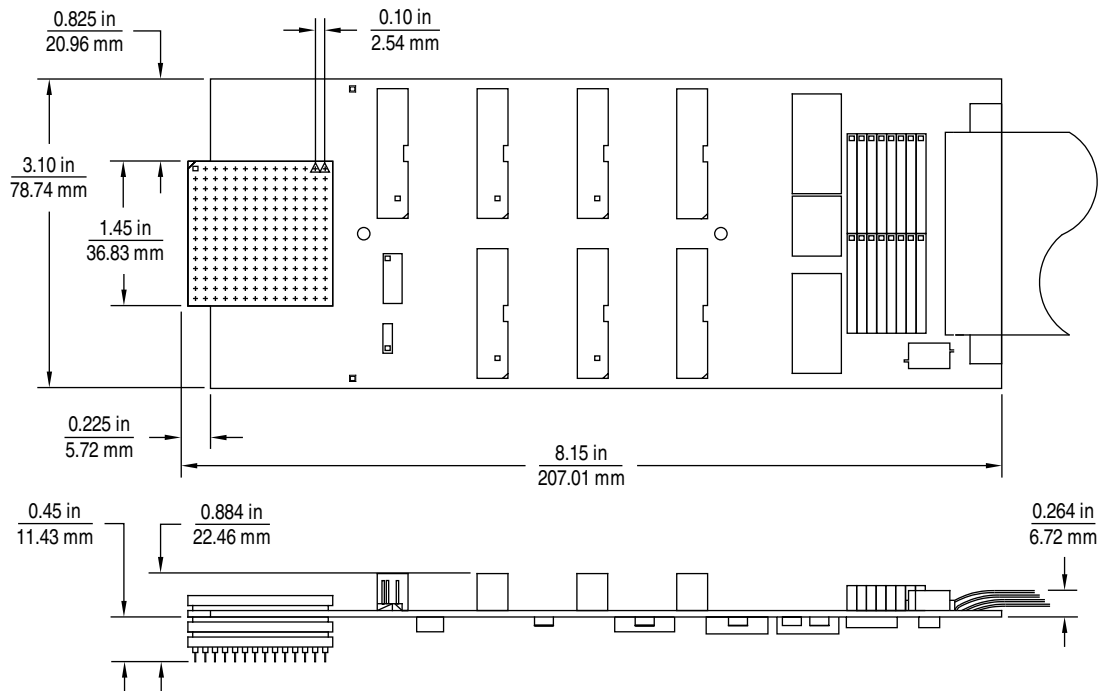
# Motorola 68332 Preprocessor Interface

**For use with  
HP logic analyzers**

The Hewlett-Packard E2413C preprocessor interface provides an easy way to connect a Hewlett-Packard logic analyzer to a target system using the Motorola 68332 microcontroller. 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 which displays execution traces in CPU32 microcontroller mnemonics. Instructions which are pre-fetched but not executed

by a coprocessor, or executed in background mode, are marked in the trace display. When the 68332 is configured appropriately, the HP E2413C will capture and disassemble internal (Show) cycles. Bus cycle filtering is also provided to selectively remove different bus cycle types from the display.



**HP E2413C  
Motorola 68332  
preprocessor**

## Key Specifications

### Pods

The preprocessor interface has connections for 7 logic analyzer pods. For disassembly 4 pods must be used. 7 pods would allow timing measurements of all processor signals.

### Termination Adapters (TA's)

None are required for state analysis as the pods are terminated on the preprocessor interface. One TA (01650-63203) is required for each pod used for timing analyzer measurements.

### Logic Analyzers Supported

HP 1660A/61A/62A

HP 16540/41[A-D], 16542A, 16550A, 16554A, 16555A, 16556A

### Microcontrollers Supported

Motorola 68331, 68332, and 68335 microcontrollers in a 132-pin PQFP package (requires optional adapter shown below) at a maximum clock speed of 20 MHz, and all other microcontrollers made by other manufacturers that comply with Motorola 68332 specifications.

### Optional Adapters Available

HP E3417A adapts the HP E2413C to a 132-pin PQFP/CQFP package.

### Signal Line Loading

8 pF on all signals except for CLKOUT which has 40 pF.

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