HP E5335A

Motorola 68F333 160-pin PQFP Adapter

For use with HP logic analyzers and emulators

The Hewlett-Packard HP E5335A Motorola 68F333 160-pin PQFP adapter provides an easy way to connect a Hewlett-Packard logic analyzer or emulator to a Motorola 68F333 microcontroller in a 160-pin 0.65 mm pitch Plastic Quad Flat Pack (PQFP) or Ceramic Quad Flat Pack (CQFP) surface-mounted device. Two different mounting techniques are supported. Using the first technique, the user attaches a locator base to the PC board area around the chip to be probed with adhesive supplied with the HP E5335A. The probe adapter then slides down over the chip and attaches to the locator base.

A small PC board with a PGA connector for the logic analyzer or emulator is then installed on top of the probe adapter. With the second technique, the user lays out the printed circuit board to include four mounting holes with threaded inserts. The user then slides a slightly different locator base over the chip (to provide macro-alignment for the probe adapter), and then installs the probe adapter. With the second technique, it is not necessary to glue the locator base to the PC board as the probe adapter attaches to the holes in the PC board that contain the threaded inserts.

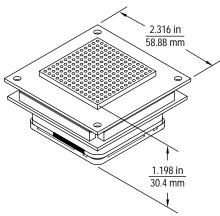


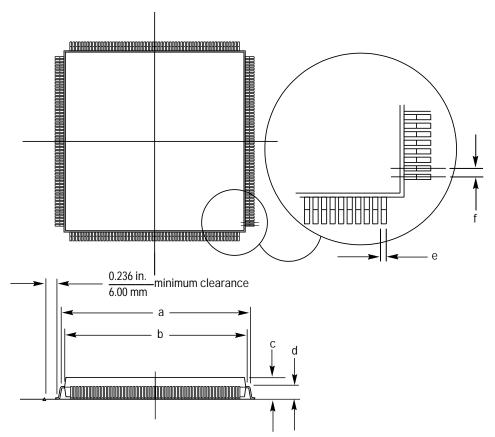
Figure 1. HP E5335A Motorola 68F333 160-pin PQFP Probe Adapter



Key Specifications

Chip Dimension Requirements

The HP E5335A Probe Adapter will successfully probe 160-pin CQFP or PQFP devices that conform to the dimensions in Figure 2.



Included Accessories

The HP E5335A includes one PGA Interface Board, one Probe Adapter, one Locator Base (5042-1706), four 2-56 screws (0590-2246), a Pin Guard to protect the Probe Adapter when not in use, and a tube of Loctite® Superbonder® 495 adhesive to install the Locator Base.

Supported HP Products

The HP E5335A is designed to work with the HP E2439B 68F333 Logic Analyzer Preprocessor and the HP 64782D 68F333 Emulator.

a (min.) a (max.) b (max.) c (max.) d (min.) e (max.) 1.127 in. 1.185 in. 1.070 in. 0.155 in. 0.090 in. 0.012 in. 0.0256 in. (28.63 mm) (30.1 mm) (27.18 mm) (3.9 mm) (2.29 mm) (0.31 mm) (0.65 mm)

Figure 2. Chip dimension requirements

The External Mount Locator Base Kit (5042-1707) is also available for users who choose to install mounting holes in their PC board. The dimensions in Figure 3 should be used when designing a PC board to use the External Mount Locator Base. Additional locator bases with inserts (5042-1706) are also available.

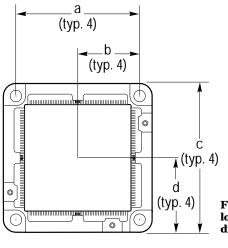
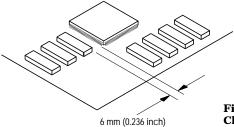


Figure 3. External locator base dimensions

a	b	С	d
1.299 in	0.650 in.	1.593 in.	0.797 in.
(33.4 mm)	(16.5 mm)	(40.47 mm)	(20.24 mm)

Clearance Area Requirement

The user must provide a clearance area of 6 mm (0.236 in) around the perimeter of the chip regardless of which locator base is used, as shown in Figure 4. No components can be mounted in this area.



minimum clearance

Figure 4. Clearance area requirements



For more information, call your local HP sales office listed in your telephone directory, or an HP regional office listed below for the location of your nearest sales office.

United States:

Hewlett-Packard Company
Test and Measurement Organization 5301 Stevens Creek Blvd. Bldg. 51L-SC Santa Clara, CA 95052-8059 1 800 452 4844

Canada:

Hewlett-Packard Canada Ltd. 5150 Spectrum Way Mississauga, Ontario L4W 5G1 (905) 206 4725

Europe: Hewlett-Packard European Marketing Centre P.O. Box 999 1180 AZ Amstelveen The Netherlands

Japan: Yokogawa-Hewlett-Packard Ltd. Measurement Assistance Center 9-1, Takakura-Cho, Hachioji-Shi, Tokyo 192, Japan (81) 426 48 0722

Latin America:

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