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## HP References in this Manual

This manual may contain references to HP or Hewlett-Packard. Please note that Hewlett-Packard's former test and measurement, semiconductor products and chemical analysis businesses are now part of Agilent Technologies. We have made no changes to this manual copy. In other documentation, to reduce potential confusion, the only change to product numbers and names has been in the company name prefix: where a product number/name was HP XXXX the current name/number is now Agilent XXXX. For example, model number HP8648A is now model number Agilent 8648A.

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# Installation Guide

Publication number E2492-92005  
May 1999

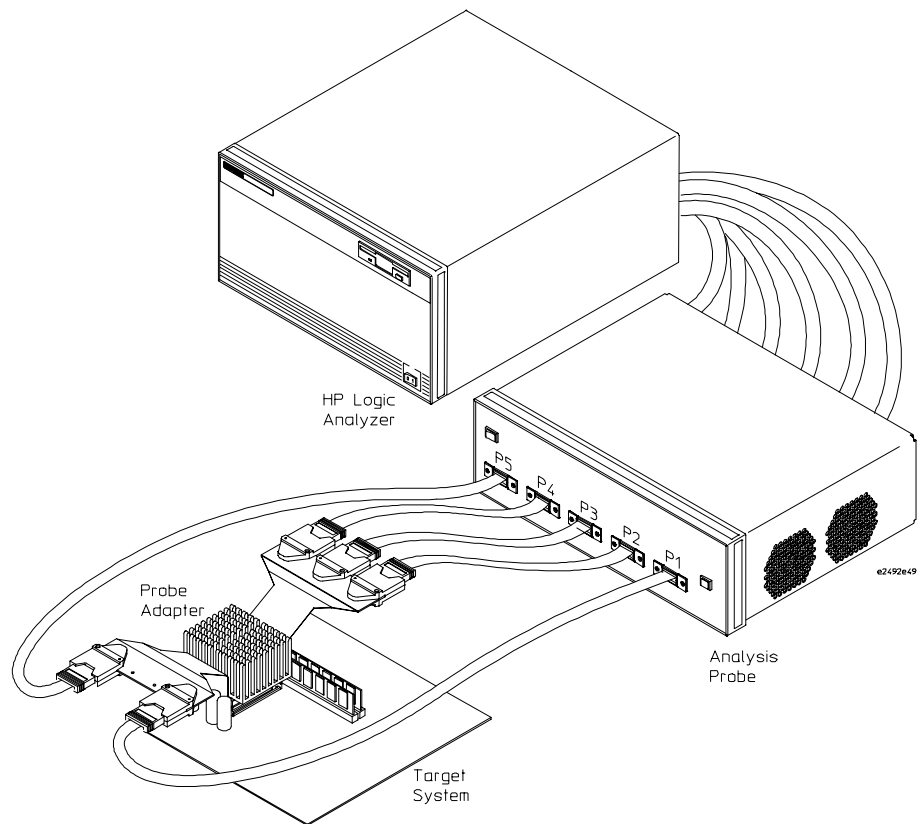
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## HP E2492D Probe Adapter for the Intel®Celeron™ Processor

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## Installation at a Glance



This Installation Guide explains how to install Hewlett-Packard's probe adapter for the Intel®Celeron™ processor in the 370-pin PPGA package. The probe adapter provides a quick and reliable connection from a processor to the HP E2487A/C Analysis Probe. The analysis probe then connects to your HP logic analyzer for state analysis.

### Installation Overview

- Remove the processor.
- Install the probe adapter.
- Connect the processor the probe adapter.
- Connect the probe adapter to the HP E2487A/C analysis probe.

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## Installation

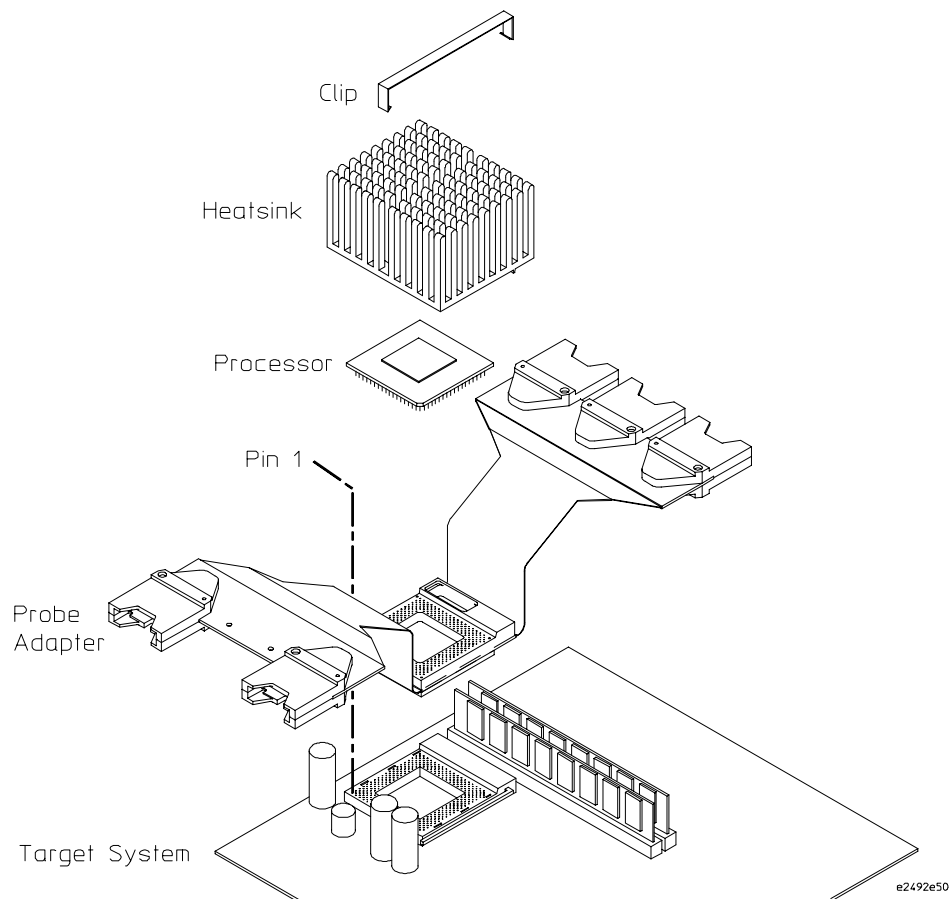
- 1 Remove the clip and heatsink from the processor on the target system.
- 2 Remove the processor from the socket on the target system.
- 3 Install the probe adapter on the target system. Ensure that the connector is fully seated.
- 4 Install the processor on the socket of the probe adapter. Ensure that the connector is fully seated.

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### CAUTION

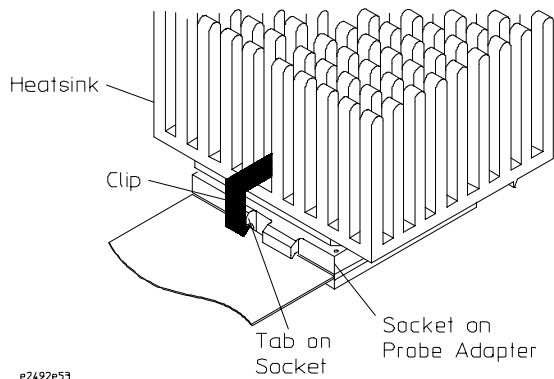
Bending the flexible cable beyond the minimum bend radius will shorten the life of the probe adapter. See the dimension diagram the end of this document for minimum bend radius.

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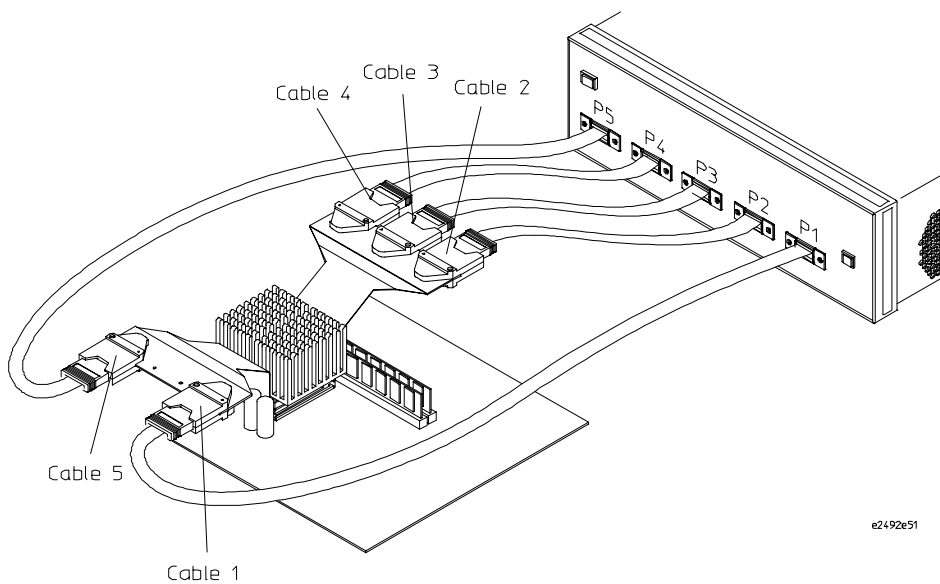
## Installation

- 5 Use the clip to attach the heatsink to the socket on the probe adapter.



- 6 Connect the probe adapter to the HP E2487A/C Analysis Probe

The probe adapter has five high-density connectors, labeled Cable 1 through Cable 5. The HP E2487A/C Analysis Probe also has five high-density cabled connectors, labeled P1 through P5. Connect the probe adapter cables to the correspondingly-numbered analysis probe cables.



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## Operating characteristics

The following operating characteristics are not specifications, but are typical operating characteristics for the probe adapter.

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### Operating characteristics

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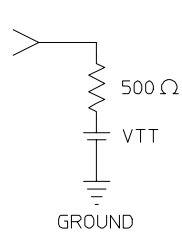
<b>Microprocessor Compatibility</b>	Intel® Celeron™ processor in a 370-pin PPGA package
<b>Power Requirements</b>	The probe adapter draws a maximum 100 mA @ 5V, which is supplied by the logic analyzer. CAT I, Pollution degree 2.
<b>Environment</b>	The probe adapter is intended for indoor use only.
<b>Environmental Temperature</b>	Operating +5 to +40 degrees C Non operating -40 to +70 degrees C
<b>Altitude</b>	Operating 3,100 m (10,000 ft.) Non operating 4,600 m (15,000 ft.)
<b>Humidity</b>	Up to 80% non condensing. Avoid sudden, extreme temperature changes which could cause condensation within the instrument.
<b>Bus Timing</b>	The HP E2492D and the HP E2487A support systems meeting the typical bus timing specifications of Celeron processor systems with a bus speed of 66 MHz.

## Cleaning

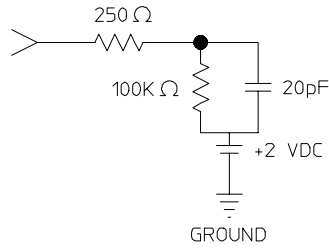
### Signal Line Loading

The following schematics show the signal line loading.

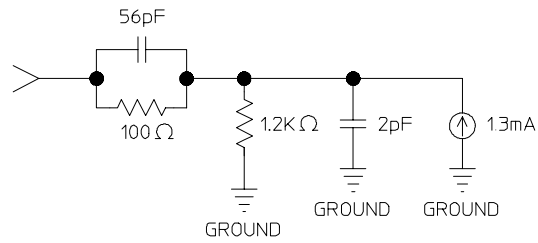
GTL Signal Loading



Non-GTL Signal Loading



Clock Signal Loading



e2492b03

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## Cleaning

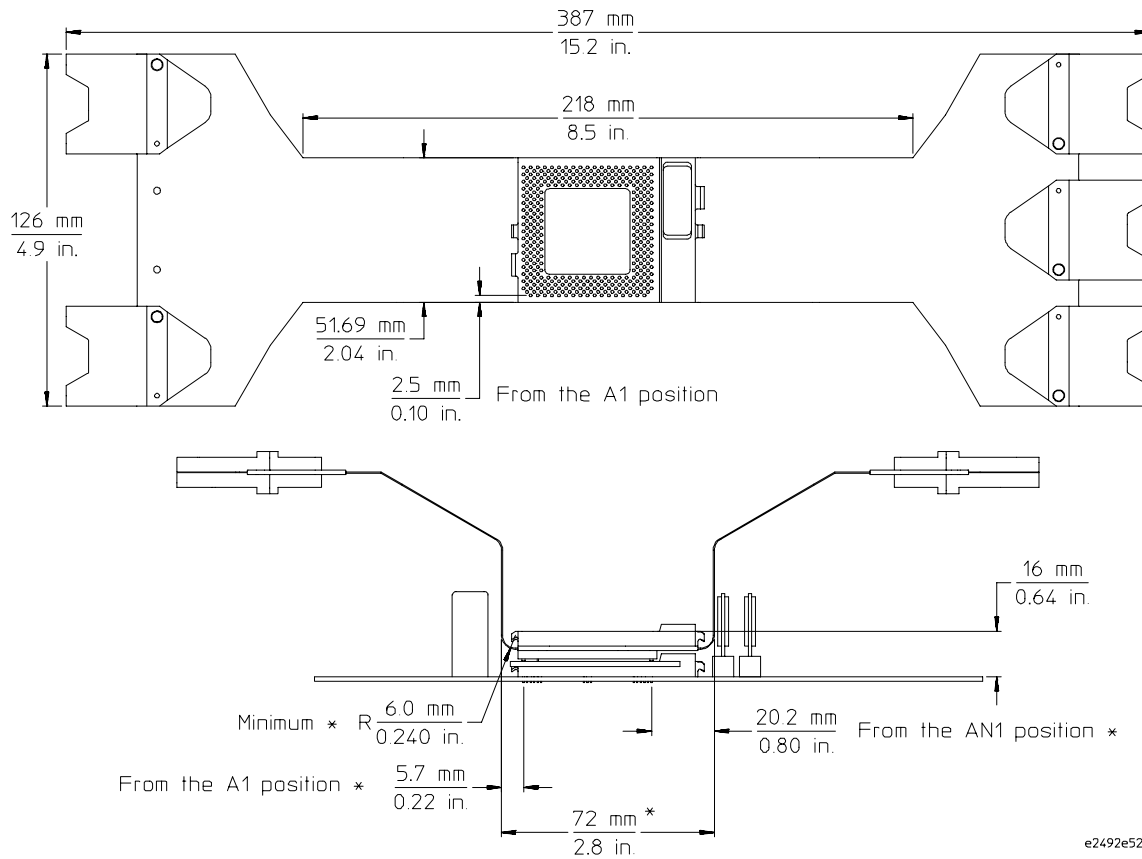
Remove any dust or debris from the probe adapter with precision dusting cleaner (otherwise known as inert dusting gas or compressed air).

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## Replaceable parts

The repair strategy for this probe adapter is product replacement. Contact your nearest Hewlett-Packard Sales Office.

Dimensions and minimum operating space



\* = Recommended minimum operating space.

**CAUTION**

Bending the flexible cable beyond the minimum operating space will shorten the life of the probe adapter.









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#### **Safety**

This apparatus has been designed and tested in accordance with IEC Publication 348, Safety Requirements for Measuring Apparatus, and has been supplied in a safe condition. This is a Safety Class I instrument (provided with terminal for protective earthing). Before applying power, verify that the correct safety precautions are taken (see the following warnings). In addition, note the external markings on the instrument that are described under "Safety Symbols."

#### **Warning**

- Service instructions are for trained service personnel. To avoid dangerous electric shock, do not perform any service unless qualified to do so. Do not attempt internal service or adjustment unless another person, capable of rendering first aid and resuscitation, is present.
- Whenever it is likely that the ground protection is impaired, you must make the instrument inoperative and secure it against any unintended operation.
- Do not operate the instrument in the presence of flammable gasses or fumes. Operation of any electrical instrument in such an environment constitutes a definite safety hazard.
- Do not install substitute parts or perform any unauthorized modification to the instrument.

#### **Safety Symbols**



Instruction manual symbol: the product is marked with this symbol when it is necessary for you to refer to the instruction manual in order to protect against damage to the product.



Hazardous voltage symbol.



Earth terminal symbol: Used to indicate a circuit common connected to grounded chassis.

#### **WARNING**

The Warning sign denotes a hazard. It calls attention to a procedure, practice, or the like, which, if not correctly performed or adhered to, could result in personal injury. Do not proceed beyond a Warning sign until the indicated conditions are fully understood and met.

#### **CAUTION**

The Caution sign denotes a hazard. It calls attention to an operating procedure, practice, or the like, which, if not correctly performed or adhered to, could result in damage to or destruction of part or all of the product. Do not proceed beyond a Caution symbol until the indicated conditions are fully understood or met.

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Hewlett-Packard warrants that its software and firmware designated by Hewlett-Packard for use with an instrument will execute its programming instructions when properly installed on that instrument. Hewlett-Packard does not warrant that the operation of the instrument software, or firmware will be uninterrupted or error free.

## Limitation of Warranty

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Hewlett-Packard Company certifies that this product met its published specifications at the time of shipment from the factory. Hewlett-Packard further certifies that its calibration measurements are traceable to the United States National Institute of Standards and Technology, to the extent allowed by the Institute's calibration facility, and to the calibration

facilities of other International Standards Organization members.

## About this edition

This is the first edition of the *HP E2492D Probe Adapter for the Intel®Celeron™ Processor Installation Guide*.

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New editions are complete revisions of the manual. Many product updates do not require manual changes and manual corrections may be done without accompanying product changes. Therefore, do not expect a one-to-one correspondence between product updates and manual updates.

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