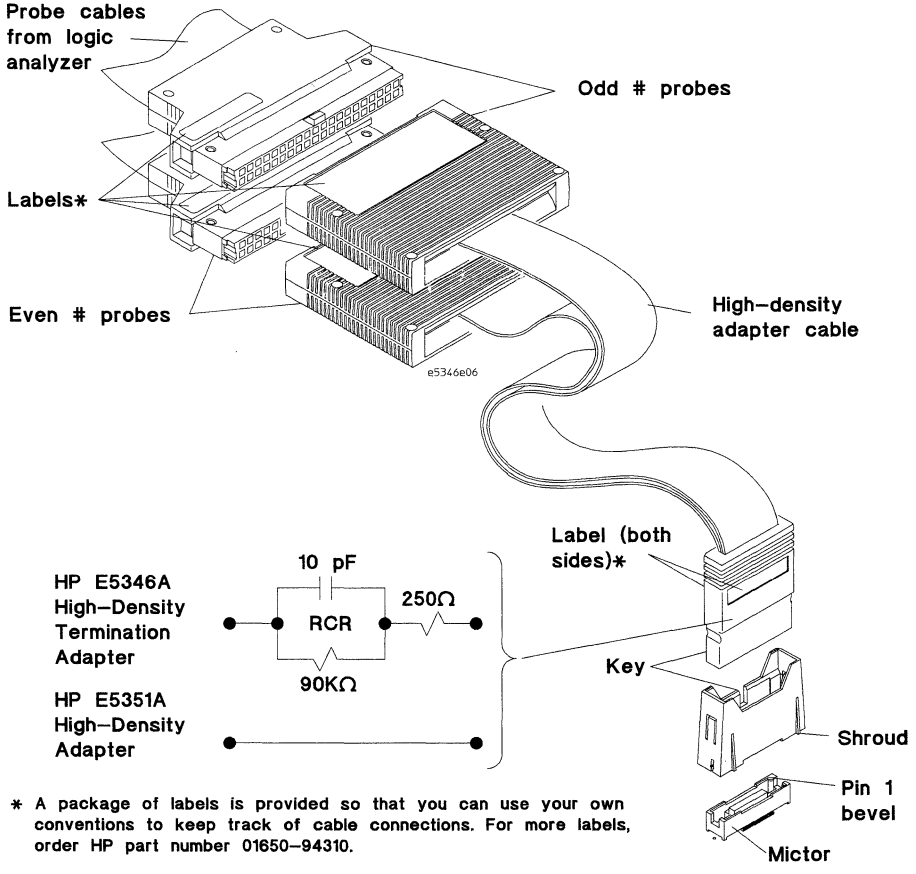
HP E5346A/E5351A High-Density Adapter Cable Installation Note

High-density adapter cables provide a convenient way to connect two HP logic analyzer probe cables to a small area of a target system. The HP E5346A cable has RCR networks in the cable end that connects to the high-density AMP Mictor (***M**atched **I**mpedance **C**onnec**TOR***) connector. The HP E5351A cable does not have RCR networks, so terminations must be made on the target system.



* A package of labels is provided so that you can use your own conventions to keep track of cable connections. For more labels, order HP part number 01650–94310.

Installation overview

1 Attach the Mictor connector(s) to the target system. Use 38-pin surface mount receptacles, AMP part number 2-767004-2.

2 Align the Mictor connector with the support shroud. Note pin 1 orientation for both connector and shroud.

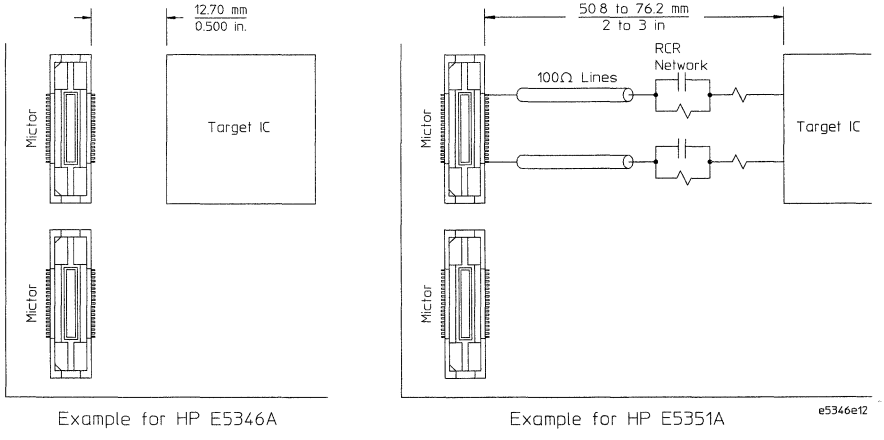
3 Attach the support shroud around the Mictor connector. Use HP Part Number E5346-44701 support shroud.

4 Connect the high-density adapter cable to the Mictor connector and then to the logic analyzer.

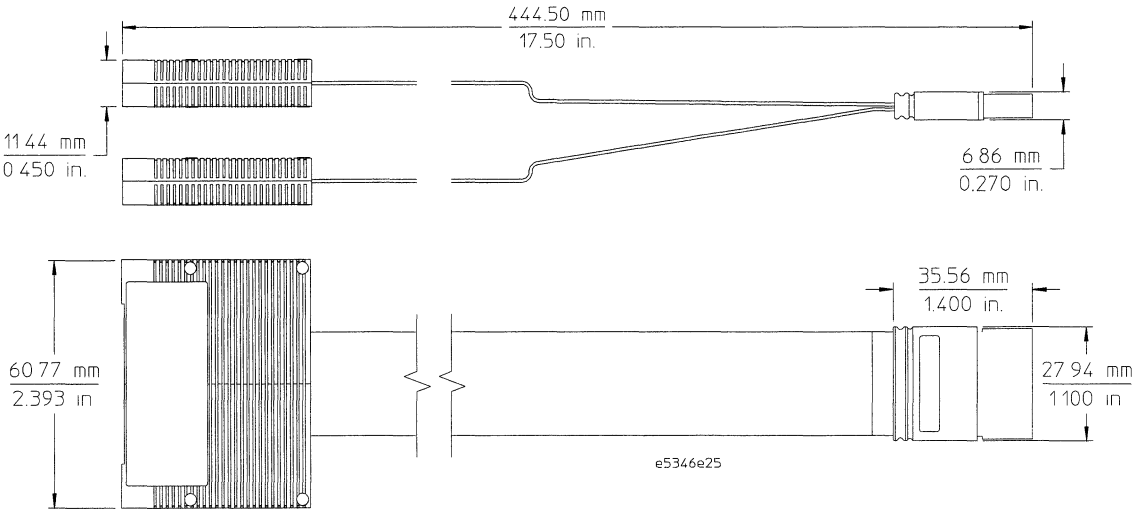
Tabs on the support shroud lock the high-density adapter cable into the Mictor connector to provide dependable connections and prevent it from inadvertently being disconnected. They also protect the flexible end of the adapter from being bent and damaged.

Reference

- Refer to HP publication number 5962-8620E *Minimizing Intrusion Effects when Probing with a Logic Analyzer* for help on the terminations when using the HP E5351A cable.
- Use the illustrations on the following pages to plan and layout your target system.

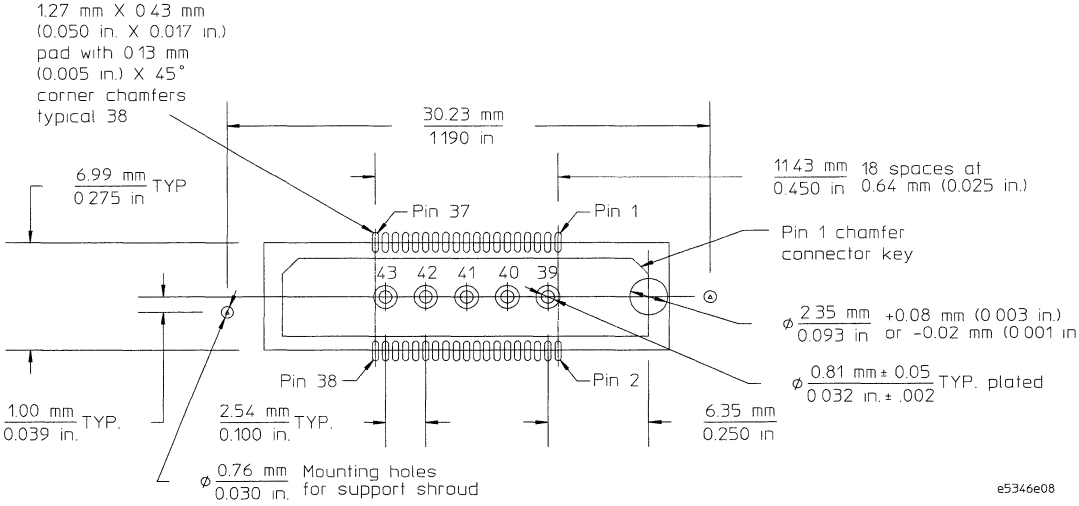


Examples of target system layouts

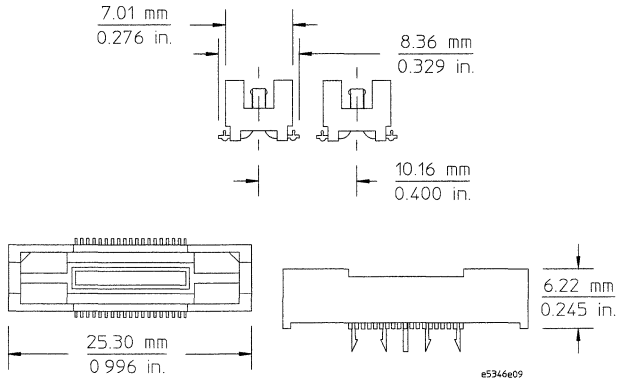


High-density adapter cable dimensions

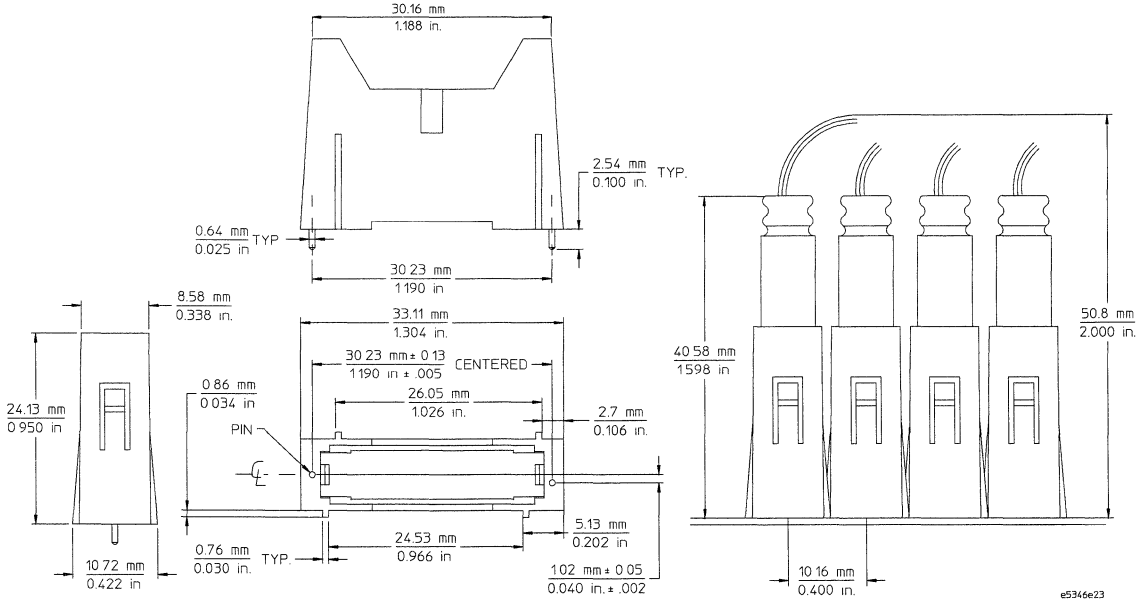
Notice the holes for mounting the support shrouds in the following illustration. One of the holes is off center to allow 0.40 in. (1.02 mm) centers when using multiple connectors.



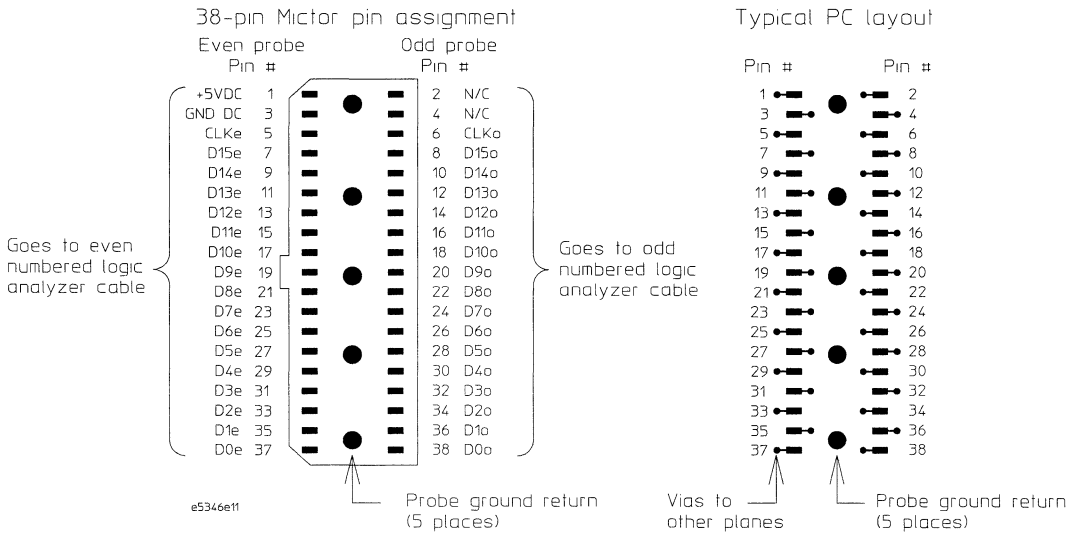
Board pad details of Mictor connector and support shroud



Mictor connector dimensions



Support shroud dimensions



Top view surface mount receptacle

Pin 1 and pin 3. Do not use these pins.

Pins 5, 7, 9, ... 37. These pins are even numbered logic probe inputs. CLKe is the clock probe input used in state analysis. D15e to D0e on the even side are probe data inputs.

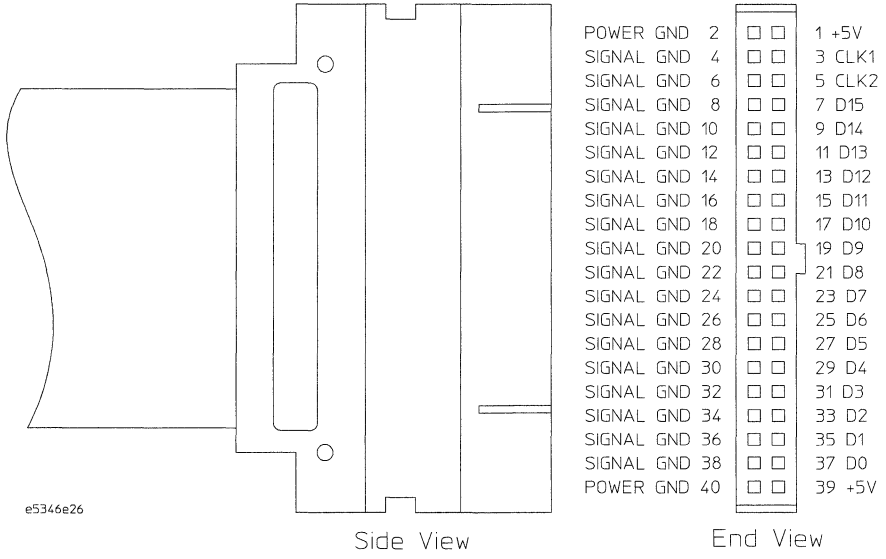
Pin 2 and pin 4. Do not connect these pins. They are SCL and SDA, which are used by the HP logic analyzer with an emulator or analysis probe (preprocessor) to program or read target information.

Pins 6, 8, 10, ... 38. These pins are odd numbered logic probe inputs. CLKo is clock probe input used in state analysis. D15o to D0o on the odd side are probe data inputs.

Grounds. There are five through-hole connections that are the ground returns for the 32 data and 2 clock probe inputs. This connection should be made to the target's digital ground plane as close to the target as possible.

HP E5346A/E5351A High-Density Adapter Cable Pin Assignments			
AMP Mictor-38 Connector		Logic Analyzer Pods	
Signal Name	Pin Number	J1 (Even Pod)	J2 (Odd Pod)
CLOCK even	5	3	
D15 even	7	7	
D14 even	9	9	
D13 even	11	11	
D12 even	13	13	
D11 even	15	15	
D10 even	17	17	
D9 even	19	19	
D8 even	21	21	
D7 even	23	23	
D6 even	25	25	
D5 even	27	27	
D4 even	29	29	
D3 even	31	31	
D2 even	33	33	
D1 even	35	35	
D0 even	37	37	
CLOCK odd	6		3
D15 odd	8		7
D14 odd	10		9
D13 odd	12		11
D12 odd	14		13
D11 odd	16		15
D10 odd	18		17
D9 odd	20		19
D8 odd	22		21
D7 odd	24		23
D6 odd	26		25
D5 odd	28		27
D4 odd	30		29
D3 odd	32		31
D2 odd	34		33
D1 odd	36		35
D0 odd	38		37

HP E5346A/E5351A High-Density Adapter Cable Pin Assignments			
AMP Mictor-38 Connector		**Logic Analyzer Pods**	
Signal Name	**Pin Number**	**J1 (Even Pod)**	**J2 (Odd Pod)**
GROUND	39-43	All even pins	All even pins
These pins are +5 volt supply and DC return for analysis probes.			
+5 VDC	1	1, 39	1, 39
GROUND	3	2, 40	2, 40
Do not connect the following pins. They are used by the HP logic analyzer with an emulator or analysis probe to program or read target information.			
SCL	2		5
SDA	4	5	



Logic Analyzer Pod

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- Before turning on the instrument, you must connect the protective earth terminal of the instrument to the protective conductor of the (mains) power cord. The mains plug shall only be inserted in a socket outlet provided with a protective earth contact. You must not negate the protective action by using an extension cord (power cable) without a protective conductor (grounding). Grounding one conductor of a two-conductor outlet is not sufficient protection.
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- Capacitors inside the instrument may retain a charge even if the instrument is disconnected from its source of supply.

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.

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About this edition

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