Quick selection guide

For logic analyzer pod connection	Connection to system under test	Single-ended* or differential	Number of channels	Agilent model number or part number	Page
40-pin	Flying leads	Single-ended	17	E5383A	12
40-pin	Pro Series soft touch	Single-ended	34	E5404A	21
40-pin	Half-size soft touch	Single-ended	17	E5396A	23
40-pin	Soft touch connectorless	Single-ended	34	E5394A	20
40-pin	Samtec connector	Single-ended	34	E5385A	28
40-pin	Mictor connector	Single-ended	34	E5346A	28
40-pin	Mictor connector	Single-ended, low voltage	34	E5339A	28
40-pin	Mictor connector	Single-ended, no isolation networks	34	E5351A	32
90-pin	Flying leads	Single-ended	17	E5382A	61
90-pin	Flying leads	Differential	17	E5381A	64
90-pin	Pro Series soft touch	Differential	17	E5405A	42
90-pin	Pro Series soft touch	Single-ended	34	E5406A	42
90-pin	Half-size soft touch	Single-ended	17	E5398A	52
90-pin	Soft touch connectorless	Single-ended	34	E5390A	43
90-pin	Soft touch connectorless	Differential	17	E5387A	41
90-pin	Samtec connector	Single-ended	34	E5378A	57
90-pin	Samtec connector	Differential	17	E5379A	57
90-pin	Mictor connector	Single-ended	34	E5380A	59

* Isolation networks are included unless designated otherwise.

E5390A Single-Ended Soft Touch Connectorless Probe

The E5390A is a 34-channel single-ended soft touch connectorless probe compatible with all Agilent logic analyzers that have a 90-pin pod connector. It is capable of acquiring data at the maximum rates of the logic analyzer it is connected to. The probe has the following inputs:

- 32 single-ended data inputs
- two differential or single-ended clock inputs
- < 0.7 pf input capacitance
- 250 mV p-p minimum signal amplitude

Unused clock inputs can be used as data inputs.

The E5390A (used with logic analyzers with a 90-pin pod connector) uses the same footprint, pinout and retention module as the E5394A single-ended soft touch connectorless probe (used with logic analyzers with a 40-pin pod connector).

A kit of five retention modules is shipped with each soft touch probe. Additional kits can be ordered using Agilent part number E5387-68701.

E5398A Half-Size Soft Touch Connectorless Probe

The E5398A is a small space saving probe compatible with all Agilent logic analyzers that have a 90-pin cable connector. It is a 17-channel, single-ended probe capable of capturing data at the maximum rates of the logic analyzer it is connected to. The probe has the following inputs:

- 16 single-ended data inputs
- one differential or single-ended clock input
- <0.7 pf equivalent load capacitance
- 250 mV p-p minimum signal amplitude

Unused clock inputs can be used as data inputs.

The E5398A (used with logic analyzers with a 90-pin cable connector) uses the same footprint, pinout, and retention module as the E5396A single-ended soft touch connectorless probe (used with logic analyzers with a 40-pin cable connector).

More information about soft touch connectorless probes is available on the web at **www.agilent.com/find/softtouch**

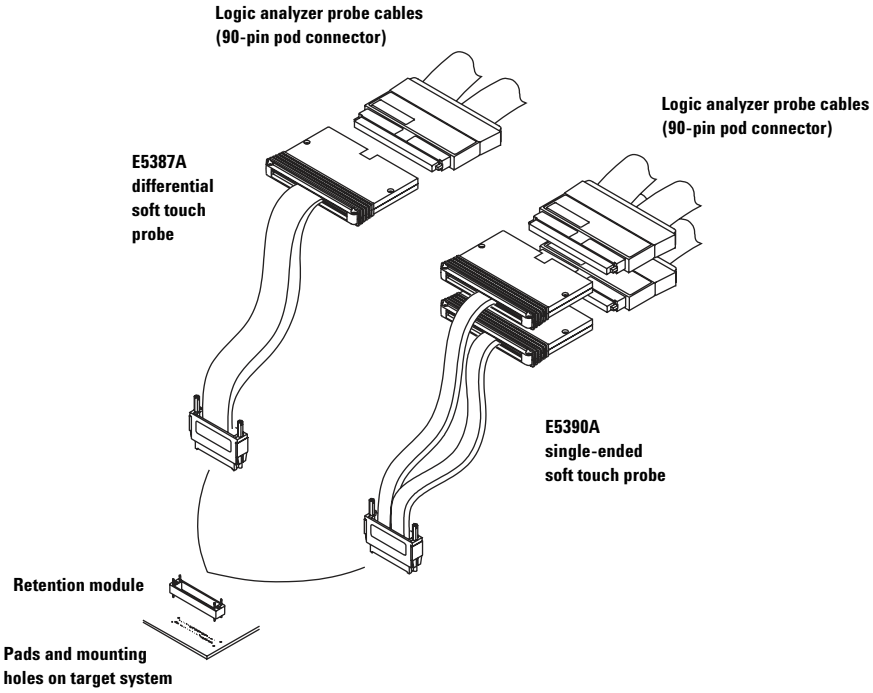


Figure 8.2. Soft touch probes

Probe Dimensions

The following figures show dimensions, footprint, and pinout information you will need to design your target system board for use with the Agilent soft touch probes.

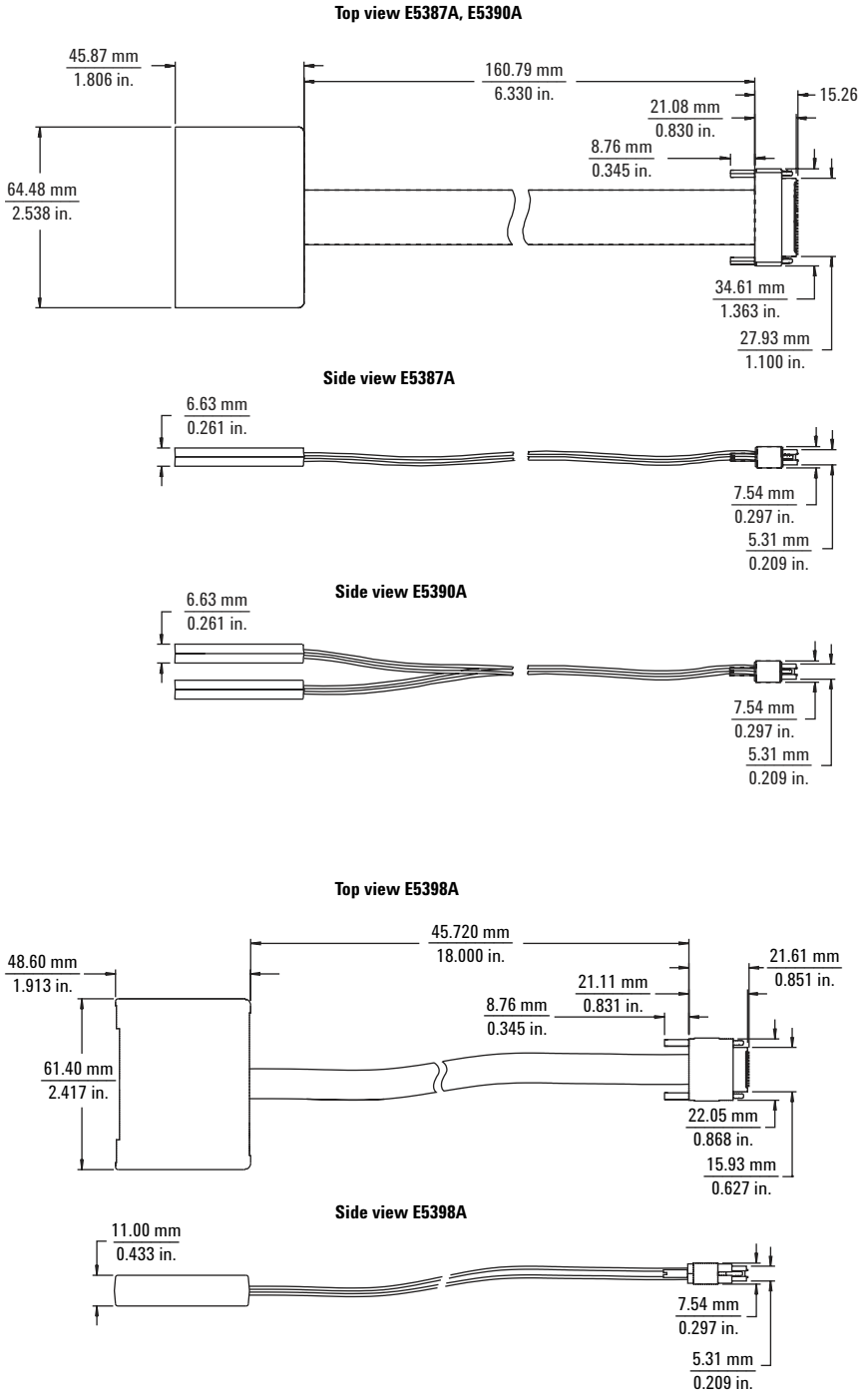


Figure 8.10. Probe dimensions

Pinout for the E5390A Single-Ended Soft Touch Probe

The following graphic and table show the E5390A single-ended soft touch probe pad numbers and logic analyzer pod inputs.

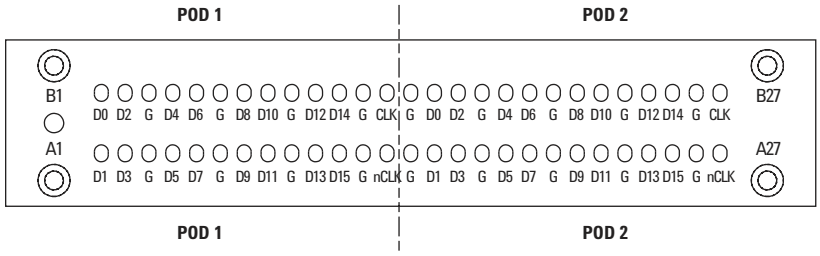


Figure 8.16. Pinout

E5390A Single-Ended Probe Signal Name	Pad #		Logic Analyzer Channel	Pod
D1	A1	→	1	Whichever pod is connected to "Odd" on the E5390A probe
D3	A2	→	3	
Ground	A3			
D5	A4	→	5	
D7	A5	→	7	
Ground	A6			
D9	A7	→	9	
D11	A8	→	11	
Ground	A9			
D13	A10	→	13	
D15	A11	→	15	
Ground	A12			
Clock (–)	A13	→	Clock	
D0	B1	→	0	
D2	B2	→	2	
Ground	B3			
D4	B4	→	4	
D6	B5	→	6	
Ground	B6			
D8	B7	→	8	
D10	B8	→	10	
Ground	B9			
D12	B10	→	12	
D14	B11	→	14	
Ground	B12			
Clock (+)	B13	→	Clock	

E5390A Single-Ended Probe Signal Name	Pad #		Logic Analyzer Channel	Pod
Ground	A14			Whichever pod is connected to "Even" on the E5390A probe
D1	A15	→	1	
D3	A16	→	3	
Ground	A17			
D5	A18	→	5	
D7	A19	→	7	
Ground	A20			
D9	A21	→	9	
D11	A22	→	11	
Ground	A23			
D13	A24	→	13	
D15	A25	→	15	
Ground	A26			
Clock (–)	A27	→	Clock	
Ground	B14			
D0	B15	→	0	
D2	B16	→	2	
Ground	B17			
D4	B18	→	4	
D6	B19	→	6	
Ground	B20			
D8	B21	→	8	
D10	B22	→	10	
Ground	B23			
D12	B24	→	12	
D14	B25	→	14	
Ground	B26			
Clock (+)	B27	→	Clock	