Tektronix Logic Analyzer Probe Selection Guide

	P6810	P6860	P6880	P6417	P6418	P6434
Logic Analyzer Used	TLA7AAx Logic Analyzer Modules TLA7ABx Logic Analyzer Modules			TLA6xx Logic Analyzers TLA7Lx/7Mx Logic Analyzer Modules TLA7Nx/7Px/7Qx Logic Analyzer Modules		
Recommended Use	Recommended for most general-purpose uses that require maximum flexibility for single-ended or differential requirements	Recommended for applications requiring many channels to be quickly connected in a small footprint	Recommended for applications requiring many differential channels to be quickly connected in a small footprint	Recommended for most general-purpose uses that require maximum flexibility	Recommended for most general-purpose uses	Recommended for applications requiring many channels to be quickly connected in a small footprint
Attachment to Target System	Probe leadsets adapt to industry standard interfaces; leads spread over a wide area	Connectorless "compression" contact (Adapter for Mictor connector available)	Connectorless "compression" contact (Adapter for Mictor connector available)	Probe leadsets adapt to industry standard interfaces; leads spread over a wide area	Probe leadsets adapt to industry standard interfaces	AMP Mictor 34 channel connector (Adapter to use P6434 with P6860/80 high-density compression land footprint available)
Probe Type	General purpose, 34 channel active probe	High density, 34 channel active probe	High density, 34 channel active differential probe	General purpose, 17 channel passive probe	General purpose, 17 channel passive probe	High density, 34 channel passive probe AMP Mictor connector required
Pin Spacing Supported	0.100 in. and 2 mm	N/A	N/A	0.100 in.	0.100 in.	N/A
Logic Signals Supported	Differential Clock Differential Data	Differential Clock Single-ended Data	Differential Clock Differential Data	Single-ended Clock and Data (Differential signal adapters available)	Single-ended Clock and Data (Differential signal adapters available)	Single-ended Clock and Data
Simultaneous State/Timing to:	800 MHz/ 8 GHz	800 MHz/ 8 GHz	800 MHz/ 8 GHz	200 MHz/ 2 GHz	200 MHz/ 2 GHz	200 MHz/ 2 GHz
Simultaneous	800 MHz/ 8 GHz/ 2 GHz	800 MHz/ 8 GHz/ 2 GHz	800 MHz/ 8 GHz/ 2 GHz	N/A	N/A	N/A

State/ Timing/ Analog to:						
Minimum Signal Amplitude Minimum Single-ended	300 mV_{p-p}	300 mV_{p-p}	300 mV_{p-p}	500 mV_{p-p}	500 mV_{p-p}	500 mV_{p-p}
Minimum Differential	V_{max} - V_{min}≥150 mV	V_{max} - V_{min}≥150 mV	V_{max} - V_{min}≥150 mV	N/A	N/A	N/A
Probe Load AC/DC	1.2 pF/20 kΩ to Ground	0.7 pF/20 kΩ to Ground	0.7 pF/20 kΩ to Ground	2 pF/20 kΩ to 2.2 V (Low-voltage adapters that work with low-voltage signals are available)	2 pF/20 kΩ to 2.2 V (Low-voltage adapters that work with low-voltage signals are available)	2 pF/20 kΩ to 2.2 V
Notes	Works with a wide-range of industry-standard accessories for flexible attachment to your target system	No connector required - only land pads required to be laid out on target system PCB for 17 and/or 34 channels. Please refer to P6860/6880 probe design guide	No connector required - only land pads required to be laid out on target system PCB for 17 and/or 34 channels. Please refer to P6860/6880 probe design guide	Works with a wide-range of industry-standard accessories for flexible attachment to your target system	Works with a wide-range of industry-standard accessories for flexible attachment to your target system	Requires AMP Mictor connector to be installed on target system PCB for every 34 channels.Please refer to P6434 probe manual