

TABLE 1—TOOLS FOR MEASURING JITTER AND SIGNAL INTEGRITY IN MULTIGIGABIT DATA STREAMS*

Where tested	Product types tested					
	Components		Subsystems		Systems	
	R and D	Manufacturing	R and D	Manufacturing	R and D	Manufacturing
Data rate						
Less than 3.2 Gbps	6-GHz-bandwidth real-time-sampling scope	20-GHz-or-greater-bandwidth sequential-sampling scope	6-GHz-bandwidth real-time-sampling scope	20-GHz-or-greater-bandwidth sequential-sampling scope	6-GHz-bandwidth real-time-sampling scope	20-GHz-or-greater-bandwidth sequential-sampling scope
	BERT capable of making input-output comparisons at user-selected voltages and times within the UI		BERT capable of making input-output comparisons at user-selected voltages and times within the UI			
	Low-jitter pulse generator		Low-jitter pulse generator			
	High-performance frequency-domain jitter-characterization system		High-performance frequency-domain jitter-characterization system			
Equal to or greater than 3.2 Gbps	20-GHz-or-greater-bandwidth sequential-sampling scope		20-GHz-or-greater-bandwidth sequential-sampling scope		20-GHz-or-greater-bandwidth sequential-sampling scope	
	BERT		BERT		BERT	
	Parallel BERT		Parallel BERT		Parallel BERT	
Media	Frequency-domain physical-layer test system	High-performance TDR scope	Frequency-domain physical-layer test system	High-performance TDR scope	Frequency-domain physical-layer test system	High-performance TDR scope

* Courtesy Agilent Technologies