

PCIe Test Bench by BERTScope

PCIe Test Bench	BERTScope View or Available Software	SIGTEST 3.1 Tests
Yes	Full Test Results SW	SigTest Full Test Result: Indicates an overall pass or fail result. The result is fail if any of the results are outside the limits specified in the selected template file. Note: Not all template limits are checked if voltage margin checking is disabled in the application settings.
Yes	Mask Test & SW	Worst Total Eye Violation: The largest number of points that violated the eye template for a single jitter analysis window.
Yes	Mask Test & SW	Number Passing Eyes: Reports the number of analysis windows for which the data passed all voltage, jitter, and timing limits specified in the template file.
Yes	Mask Test & SW	Number Failing Eyes: Reports the number of analysis windows for which the data failed a voltage, jitter or timing limit specified in the template file.
Yes	Bottom Bar & SW	Data Rate: Reports the inverse of the average recovered unit interval for the data.
Yes	Currently using UI-Jitter-p-p*	Min Time Between Crossovers: Reports the minimum time between adjacent crossovers in the data set.
Yes	Eye Diagram & SW	Mean Unit Interval: Reports the average of the recovered unit intervals for all clock recovery windows during the full test analysis.
Yes	Eye Diagram Detailed View	Max Unit Interval: Reports the maximum of the recovered unit intervals for all clock recovery windows during the full test analysis.
Yes	Eye Diagram Detailed View	Min Unit Interval: Reports the minimum of the recovered unit intervals for all clock recovery windows during the full test analysis.
Yes	Can measure at 10^{-12}	Tj @ E-12: Reports the extrapolated maximum total jitter at a Bit Error Ratio of 10^{-12} .
Yes	Can measure at 10^{-12}	Dj_dd: Reports the computed deterministic jitter delta-delta a Bit Error Ratio of 10^{-12} .
Yes	Jitter Peak Table & SW	Rj (RMS): Reports the root mean squared value of the random jitter.
Yes	Jitter Peak Table	RMS Jitter (Per Edge): Reports the root mean squared jitter for all edges analyzed throughout the entire full test analysis.
Yes	Full Test Results SW	Mean Median Peak Jitter: Reports the average median to peak jitter value for all jitter analysis windows analyzed during the full test.
Yes	Full Test Results SW	Max Median Peak Jitter: Reports the maximum median to peak jitter for a jitter analysis window analyzed during the full test.
Yes	Full Test Results SW	Min Median Peak Jitter: Reports the minimum median to peak jitter for a jitter analysis window analyzed during the full test.
Yes	Jitter Peak View & Table plus SW	Mean Peak Peak Jitter: Reports the average peak to peak jitter value for all jitter analysis windows analyzed during the full test.
Yes	Jitter Peak Detailed View	Max Peak Peak Jitter: Reports the maximum peak to peak jitter for a jitter analysis window analyzed during the full test.
Yes	Jitter Peak Detailed View	Min Peak Peak Jitter: Reports the minimum peak to peak jitter for a jitter analysis window analyzed during the full test.
Yes	Q Factor View & SW	Min Transition Eye Voltage: Reports the smallest voltage that occurred in a transition bit in the waveform.
Yes	Full Test Results SW	Max Transition Eye Voltage: Reports the largest voltage that occurred in a transition bit in the waveform.
Yes	Full Test Results SW	Min Transition Top Margin: Reports the difference between the voltage closest to encroaching on the top of the inner eye and the inner eye. If the value reported is negative it means that a voltage point violated the top of the inner eye mask. Voltage margins are only calculated if the setting is enabled in the application settings.
Yes	Full Test Results SW	Min Transition Bottom Margin: Reports the difference between the voltage closest to encroaching on the bottom of the inner eye and the inner eye. If the value reported is positive it means that a voltage point violated the bottom of the inner eye mask. Voltage margins are only calculated if the setting is enabled in the application settings.
Yes	Mask Test & SW	Transition Worst Number of Violations: The maximum number of violations that occurred in a transition eye diagram.
Yes	Q Factor at divide-by-5 & SW	Min Non Transition Eye Voltage: Reports the most negative voltage that occurred in a non-transition bit in the waveform.
Yes	Full Test Results SW	Max Non Transition Eye Voltage: Reports the most positive voltage that occurred in a non-transition bit in the waveform.
Yes	Full Test Results SW	Min Non Transition Top Margin: Reports the difference between the voltage closest to encroaching on the top of the inner eye and the inner eye. If the value reported is negative it means that a voltage point violated the top of the inner eye mask. Voltage margins are only calculated if the setting is enabled in the application settings.
Yes	Full Test Results SW	Min Non Transition Bottom Margin: Reports the difference between the voltage closest to encroaching on the bottom of the inner eye and the inner eye. If the value reported is positive it means that a voltage point violated the bottom of the inner eye mask. Voltage margins are only calculated if the setting is enabled in the application settings.
Yes	Mask Test at divide-by-5 & SW	Non Transition Worst Number of Violations: The maximum number of violations that occurred in a non-transition eye diagram.
Yes currently for 1.1		View HTML Report: If the application settings are configured to produce an HTML report the View HTML Report button will display an HTML report containing all of the full test result values and the transition and non-transition eye diagrams.

*Current Full Test Result software combines units from all bits. Individual bit UI and bit peak-to-peak jitter is now also available in on the BERTScope in the optional CleanEye software.

All (Win) tests are automated in the Full Test Result software. RjDj test run directly on BERTScope without need of external software.