

The following shows the eye pattern confirmed by overlaying data lines with varying damping resistors.

The H-cursor in the figure indicates the reference point for FPGA high/low determination.

Although changes are observed in the eye pattern, this characteristic peak remains unchanged even at 43 ohms.

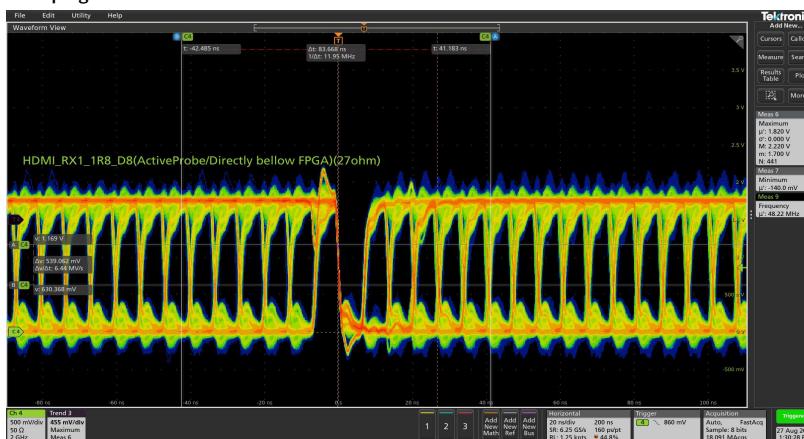
While this is a timing issue on the FPGA side, the image appears and disappears depending on the board temperature.

Though not typically done, raising the impedance to 75 ohms for experimental purposes causes the eye to collapse.

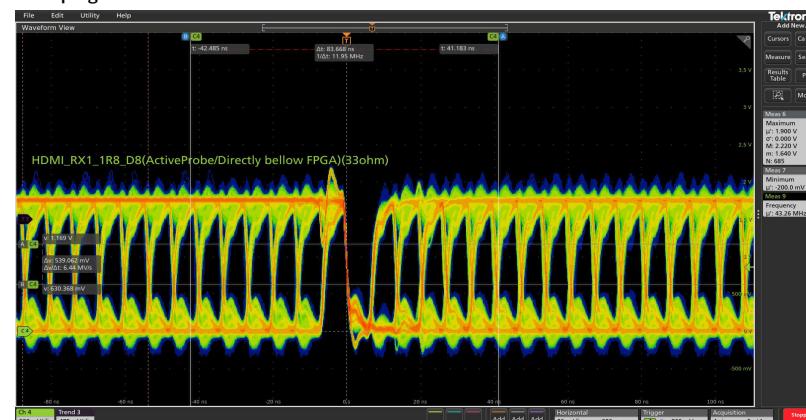
However, the maximum voltage remains above 2V, still exceeding the recommended range.

Overall, we have concluded that 33 ohms is the appropriate value.

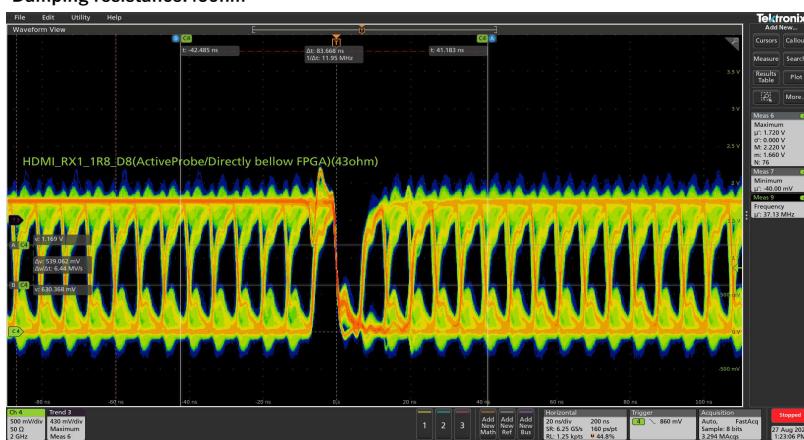
Damping resistance:27ohm



Damping resistance:33ohm



Damping resistance:43ohm



Damping resistance:75ohm

