

If we accept the default value for a probe type, that is “DATA and TRIGGER”, then the corresponding probe will be listed as the trigger signal, and its data samples are stored in the BRAM.

Therefore, the probe can be used in a boolean expression defining the trigger events. Also, its signal values are shown in the waveform viewer window.

Although considering the default value is completely legal, we should note that the probes defined as data consume some space in the BRAM and may cause memory shortage in a long sampling process.

Therefore, for optimising the BRAM size used in ILA, it is better to consider probes as DATA if we really want to monitor their signal values.