

Signal Stimulus

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Description Specifies the characteristics of the stimulus signal used when performing a signal integrity analysis on the design. This is the signal that is injected at each output pin on the net under test. The worst-case result is returned during design rule checking. **Constraints**

Stimulus Kind		specifies the type of stimulus signal that is injected during signal integrity analysis. The following stimulus types are available: <ul style="list-style-type: none">• Constant Level - the stimulus signal remains at a constant voltage - either High or Low - depending on the chosen Start Level option• Single Pulse (default) - the stimulus signal is a single pulse, whose characteristics are defined by the Start Level, Start Time and Stop Time options• Periodic Pulse - the stimulus signal is a continuous pulse train, whose characteristics are defined by the Start Level, Start Time, Stop Time and Period Time options.
Start Level		specifies the voltage level used for the Constant Level stimulus signal, or the initial voltage level for the pulse-based stimulus signals. The following levels are available: <ul style="list-style-type: none">• Low Level (default) - defined as the LOW level voltage for the output pin - dependent on the model used for the pin• High Level - defined as the HIGH level voltage for the output pin - dependent on the model used for the pin.

Start Time (s)		the start time for a pulse-based stimulus signal. Used in calculating the width of the pulse. (Default = 10.00ns).
Stop Time (s)		the stop time for a pulse-based stimulus signal. Used in calculating the width of the pulse. (Default = 60.00ns).
Period Time (s)		the time between pulses in a periodic pulse train stimulus signal. After the period time has elapsed, another identical pulse of width Stop Time - Start Time is injected. (Default = 100.00ns).

Rule Classification Unary **How Duplicate Rule Contentions are Resolved** All rules are resolved by the priority setting. The system goes through the rules from highest to lowest priority and picks the first one whose scope expression(s) match the object(s) being checked. **Rule Application** Batch DRC and during Signal Integrity analysis. **Notes** When performing a Crosstalk analysis, an Aggressor net will be injected with the stimulus defined in the Stimulus design rule, the LOW and HIGH levels of which are dependent on the model used for the driving output pin. A Victim net will get a Constant Low level voltage injected into it, with the level again being dependent on the model used for the output pin.