

Hi, All -

A clarification question came up in one of my SystemVerilog classes regarding the \$past number_of_ticks argument. A student questioned whether the argument could be an expression and I believe the answer is no, but LRM does not definitively make a precise definition. There is no BNF to describe the \$past arguments.

I did a SVDB search on number_of_ticks and only found Mantis item 1591, which did not cover the topic.

Proposal (if my assumption is correct):

17.7.3 Sampled value functions **Bottom of page 247**

WAS:

number_of_ticks must be **1** or greater. If **number_of_ticks** is not specified, then it defaults to **1**. **\$past** returns the sampled value of the expression that was present **number_of_ticks** prior to the time of evaluation of **\$past**. A clock tick is based on **clocking_event**. If the specified clock tick in the past is before the start of simulation, the returned value from the **\$past** function is a value of X.

PROPOSED:

number_of_ticks must be **an integer constant** of **1** or greater. If **number_of_ticks** is not specified, then it defaults to **1**. **\$past** returns the sampled value of the expression that was present **number_of_ticks** prior to the time of evaluation of **\$past**. A clock tick is based on **clocking_event**. If the specified clock tick in the past is before the start of simulation, the returned value from the **\$past** function is a value of X.

Regards - Cliff