


Tips & Tricks

Primetime: Debugging Constraints Typical Scenarios and Commands

 **Audience:** Design engineers using PrimeTime to debug their chip.

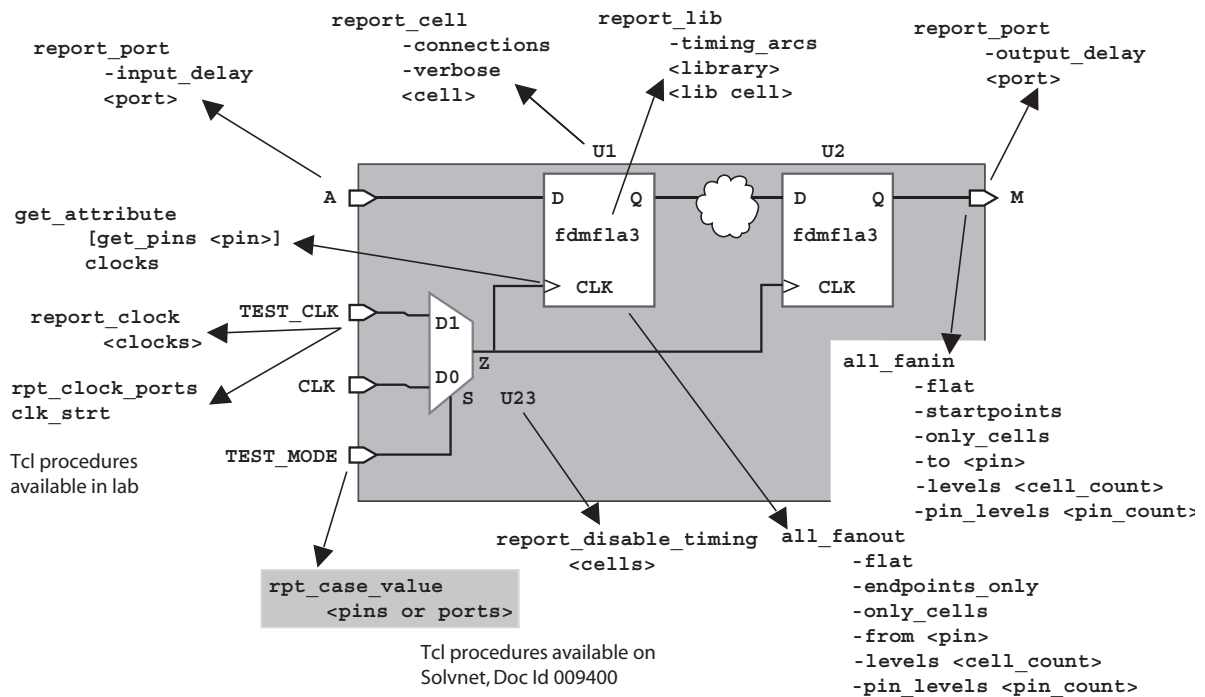
 **Overview:** This reference guide will help designers use PrimeTime more quickly and easily by showing which commands to enter at various points of design debug.

Guidelines on how to enter commands:

- If you are not sure of the command in question, use a likely string with wildcards (for example, `help *fanin*`) – this returns possible matches.
- If you know the command, and want syntax only (which is often all you need), use `help -verbose` or `<command> -help`. This is the online equivalent of a quick reference card. (for example, `all_fanin -help`)
- If you know the command and want detailed explanations, use `man`. (for example, `man all_fanin`).

BUG: `check_timing-verbose-include <clock_crossing | multiple_clock etc>`

BUG: `report_analysis_coverage-status untested-check <setup | hold etc> -exclude <no_paths etc>`



This diagram shows how to enter debugging constraints with PrimeTime.



You can identify bugs with two commands:

- Check_timing
- Report_analysis_coverage

You can investigate bugs with eight commands and three Tcl procs.

- Find the schematic element you want to explore
- Follow the arrow from the element to the relevant command or proc

PrimeTime command names are long and explicit. Thus, from the command name alone, you can get a good sense of its purpose. From the syntax, you get a good sense of how it is used. Thus, descriptions can be omitted, allowing the Job Aid to focus on identifying the right command for the task at hand.



Where do I get more information?

- This paper is an excerpt from the training on PrimeTime taught by Synopsys Instructors. For more details on the topics covered in the training and schedule please visit us on the web at <http://www.synopsys.com/support/customered/signoff.html>
- If you found this article useful you might also like:
 - "[Hierarchical Design Techniques White Paper](#)"
 - "[Report_annotated_delay](#)"
 - "[PrimeTime 2007.06 Update Training](#)"

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