

Understanding Behavioral Style

One of the three architecture models is the behavioral style. Unlike the data-flow style, a VHDL program written in behavioral style does not need to describe how the circuit will be implemented when synthesized. Instead, the behavioral style describes how the circuit's output will react to the inputs given to the circuit. The core of writing a program using the behavioral style is the **process statement**.

Using **behavioral style** in VHDL is like writing a recipe. You don't explain how the kitchen is built or how the oven is wired (the hardware implementation); instead, you describe the *steps* the cook should follow and how the dish will *turn out* depending on the ingredients (the inputs). The **process statement** is like the main set of instructions in the recipe that guides the entire cooking process.



Revision #2

Created 2025-09-09 11:56:47 UTC by BH

Updated 2025-09-09 12:01:17 UTC by BH