

HDL Tools					
	<div>Several tools are available for hardware description languages.</div> <div><ul style="list-style-type: none">• Several of these tools can be used under Emacs, since Emacs has historically been used extensively by in the HDL development domain.• This table provides information about several of these tools:<ul style="list-style-type: none">• Language Servers:<ul style="list-style-type: none">• list the various language servers, the implementation technology, the tools required to install them, their compatibility (if documented) and support for HDLs.• If there is important information that you should read, then there's a link to a separate document.</div>				
	Last updated on: 2025-09-15				
Language/Servers	hdl_checker	svlangserver	svls	verible	veridian
Server implemented in:	Python	Typescript, Javascript	Rust	C++	Rust
Install with	pip3	npm	<ul style="list-style-type: none">• Binaries• using snapcraft• from source using cargo<ul style="list-style-type: none">• to: ~/.cargo/bin	<ul style="list-style-type: none">• Binaries,• Nix• build from source:<ul style="list-style-type: none">• requires bazel, C++17, python3• homebrew<ul style="list-style-type: none">• to: \$(brew prefix)/Cellar/verible/vxxx/bin where vxxx is the version number.	<ul style="list-style-type: none">• Pre-requisites:<ul style="list-style-type: none">• verible• verilator• OS binaries• Build from source<ul style="list-style-type: none">• to: ~/.cargo/bin
<ul style="list-style-type: none">• <i>what I tried:</i>			<i>built from source, macOS</i>	<i>homebrew, macOS</i>	<i>built from source, macOS</i>
Emacs other requirements			<div>Emacs requirements:</div> <ul style="list-style-type: none">• verilog-ext• See: hdl - Verilog• PEL installs it when pel-use-verilog-ext user-option is on.		<div>Emacs requirements:</div> <ul style="list-style-type: none">• verilog-ext• See: hdl - Verilog• PEL installs it when pel-use-verilog-ext user-option is on.
Compatible with		Emacs 29.0.50 <ul style="list-style-type: none">• lsp-mode Ventilator 4.110IVerilog 10.2Verible v0.0-114...			
hdl - Verilog					
hdl - VHDL					
type checking	slang	verible	verilator		
Implemented in	<ul style="list-style-type: none">• C++• pyslang: Python	C++			
Install with	<ul style="list-style-type: none">• Build from source : use cmake.• get/build pyslang	<ul style="list-style-type: none">• Binaries,• Nix• homebrew	<ul style="list-style-type: none">• See verilator installation manual• homebrew		
hdl - Verilog					
hdl - VHDL					