

# 基于 Ubuntu 的 risc\_v tools 安装指南

## 安装：

- 1、sudo apt update
- 2、sudo apt upgrade
- 3、sudo apt-get install git
- 4、sudo apt-get install autoconf automake autotools-dev curl libmpc-dev libmpfr-dev libgmp-dev libusb-1.0-0-dev gawk build-essential bison flex texinfo gperf libtool patchutils bc zlib1g-dev device-tree-compiler pkg-config libexpat-dev
- 5、git clone https://github.com/riscv/riscv-tools.git
- 6、cd riscv-tools
- 7、git submodule update --init --recursive
- 8、git clone https://github.com/riscv/riscv-gnu-toolchain
- 9、cd riscv-gnu-toolchain
- 10、git submodule update --init --recursive
- 11、su
- 12、./configure --prefix=/opt/riscv
- 13、make
- 14、export PATH=/opt/riscv/bin:\$PATH
- 15、cd ..
- 16、export RISCVC=/path/to/install/riscv/toolchain
- 17、./build.sh
- 18、export PATH=/path/to/install/riscv/toolchain/bin:\$PATH
- 19、修改.bashrc  
export PATH=/opt/riscv/bin:\$PATH  
export PATH=/path/to/install/riscv/toolchain/bin:\$PATH
- 20、安装 gvim

## 测试：

- 1、riscv64-unknown-elf-gcc  
屏幕输出：fatal error:no input files
- 2、spike  
屏幕输出一系列的命令参数