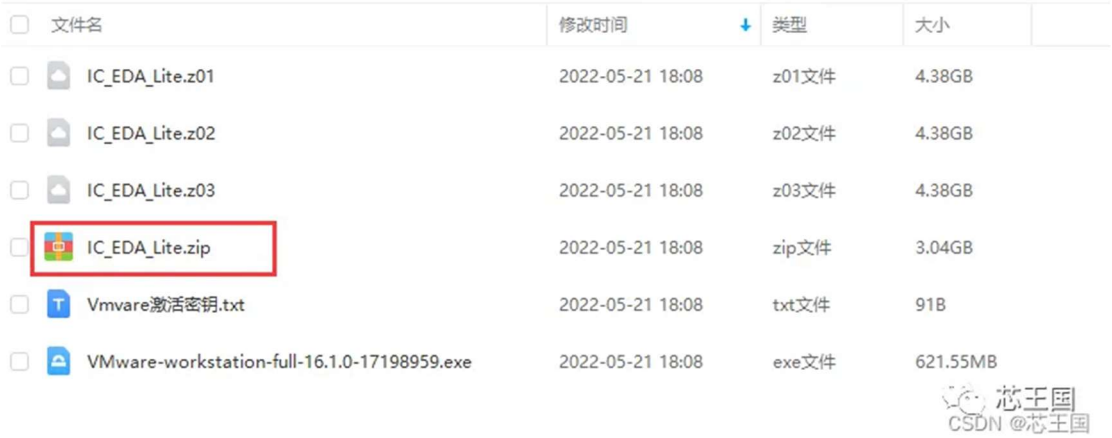
EDA Study Material for Reference

https://mp.weixin.qq.com/s/GpwRTelbjRWgXMhVu5cUSA



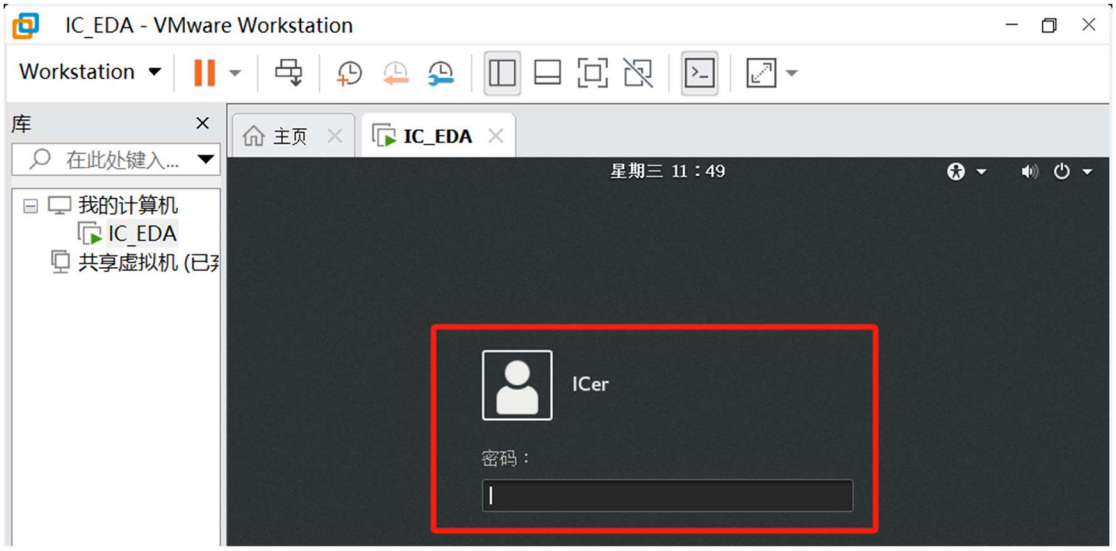
Prepare the tools

1. Install VMware and input the key
2. Extract the zip file.

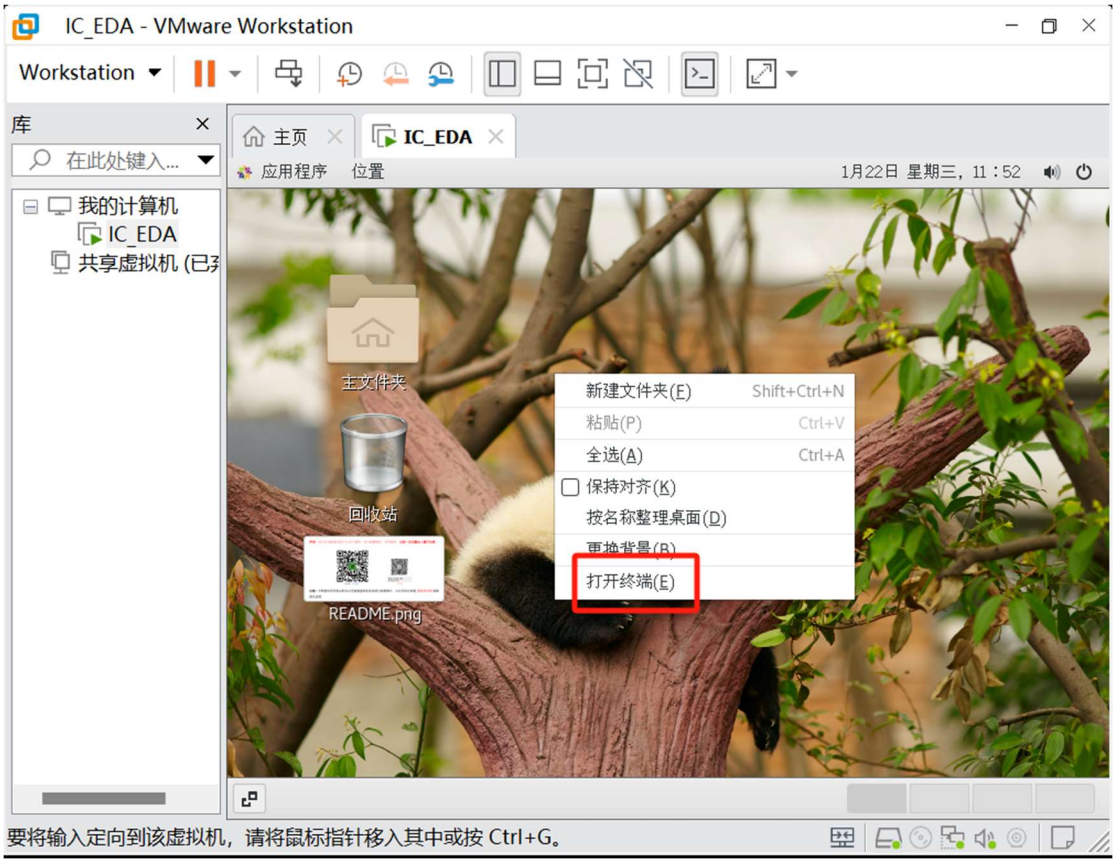
Project breath_led

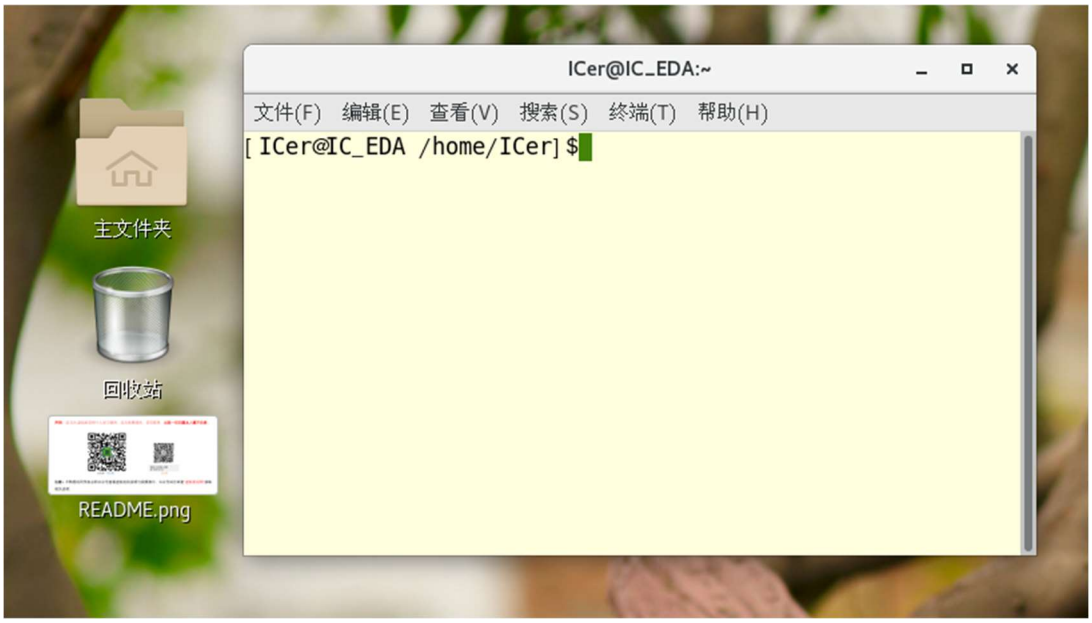
1. Run VMware and add/create virtual machine following the reference link.
2. Open virtual machine (Several minutes are needed to start the system)

3. Login Linux with user ICer and password 2022



4. Right click on the Linux desktop to open terminal.



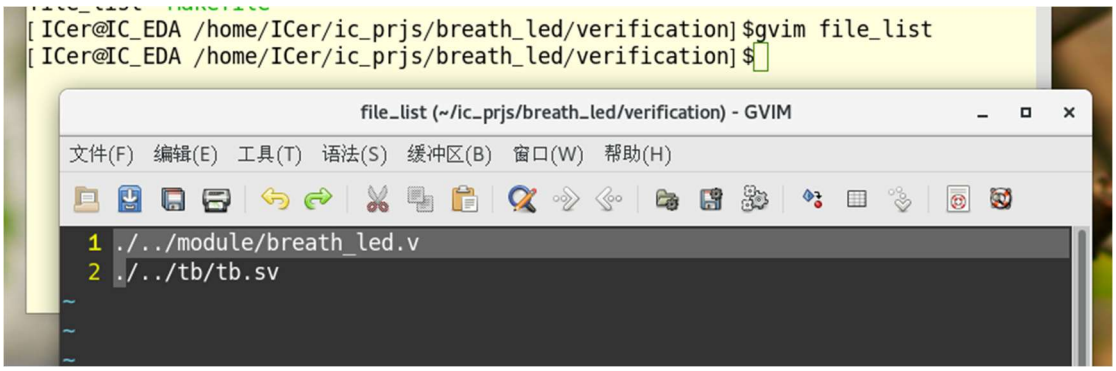


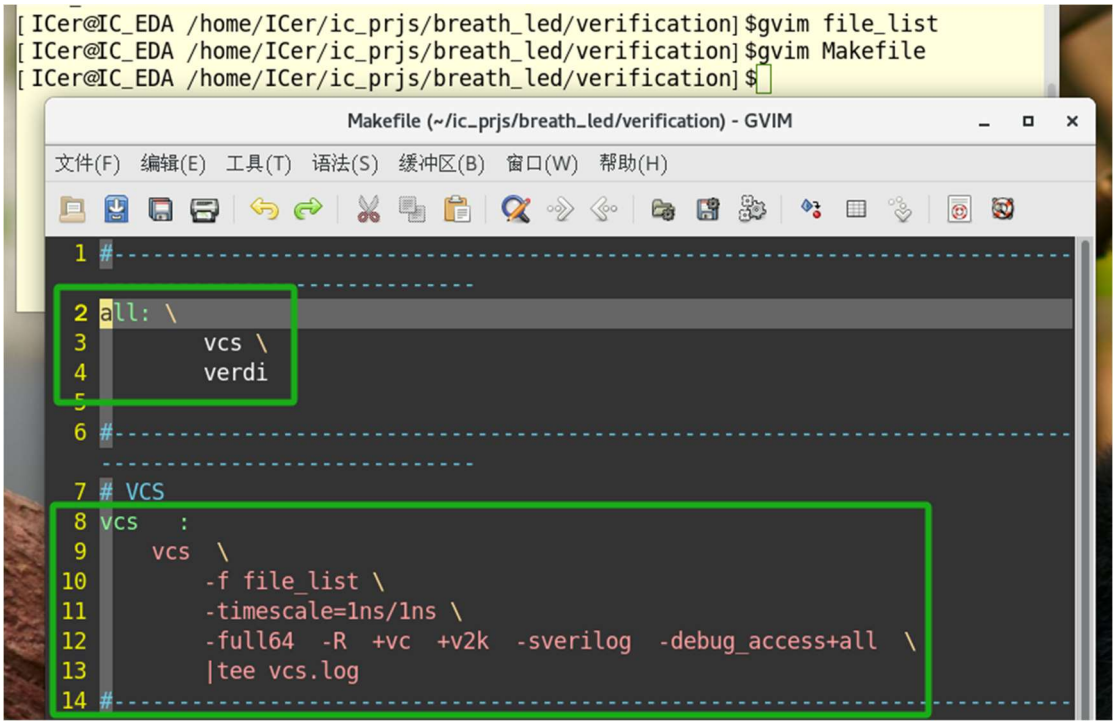
5. In terminal, go to /home/ICer/ic_prjs/breath_led/verification.

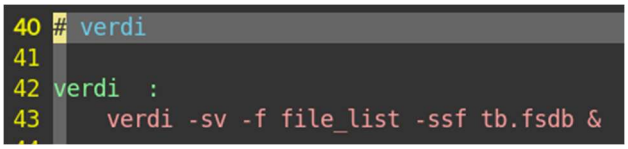
6. There are two files:

   file_list list all the files needed for simulation. (In this project, breath_led.v is DUT while tb.sv is testbench.)

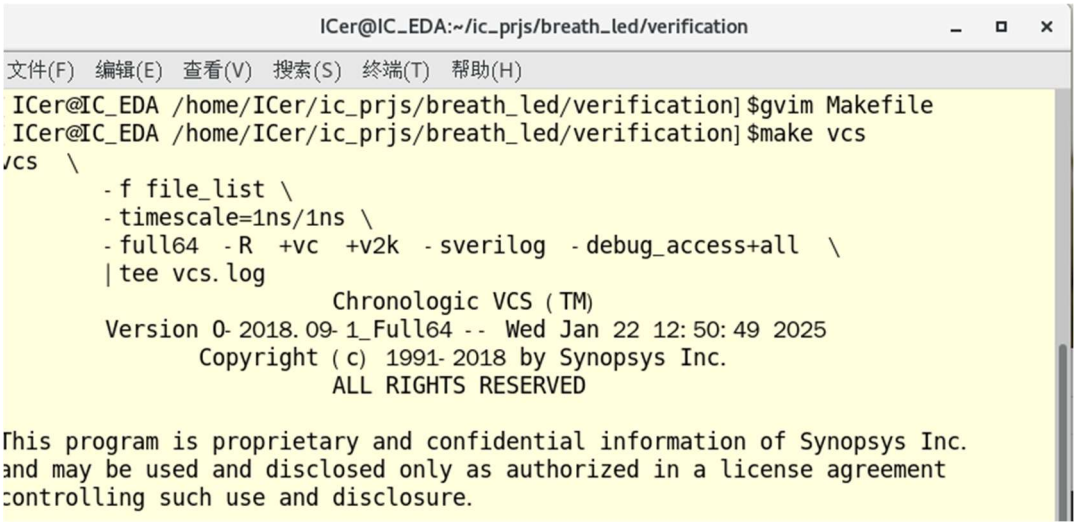
   Makefile is the makefile to run command.



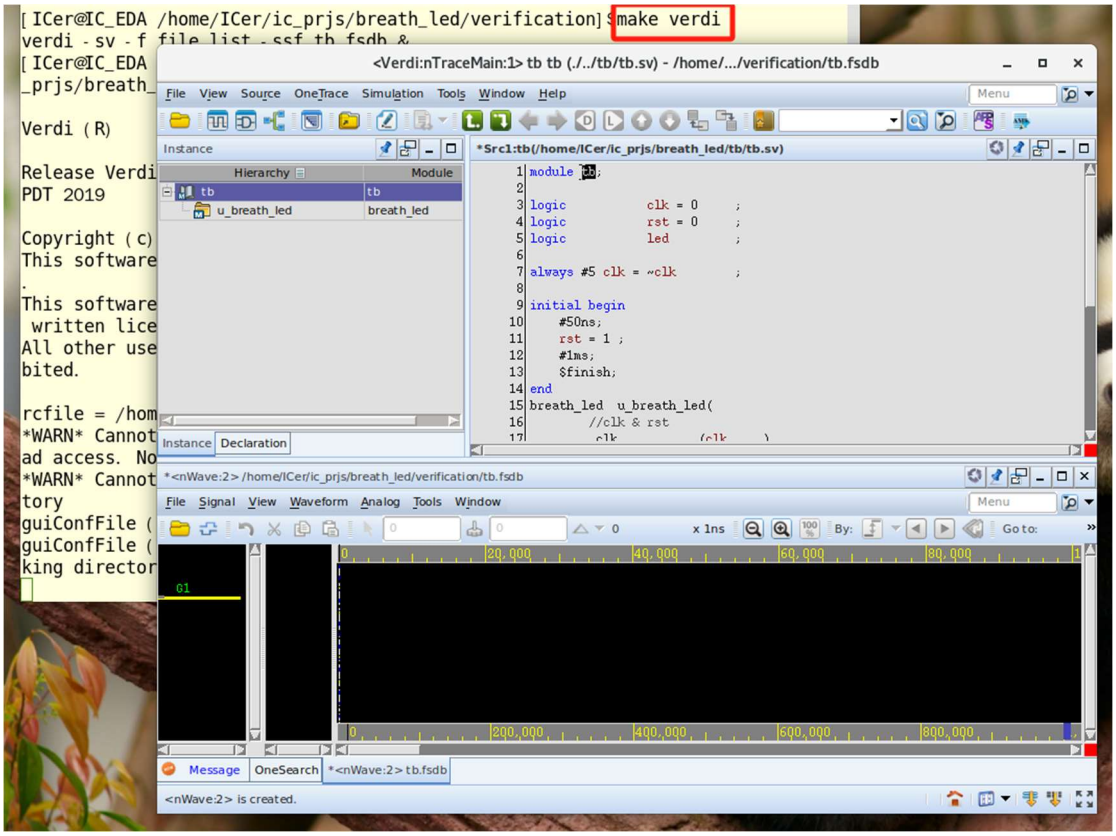




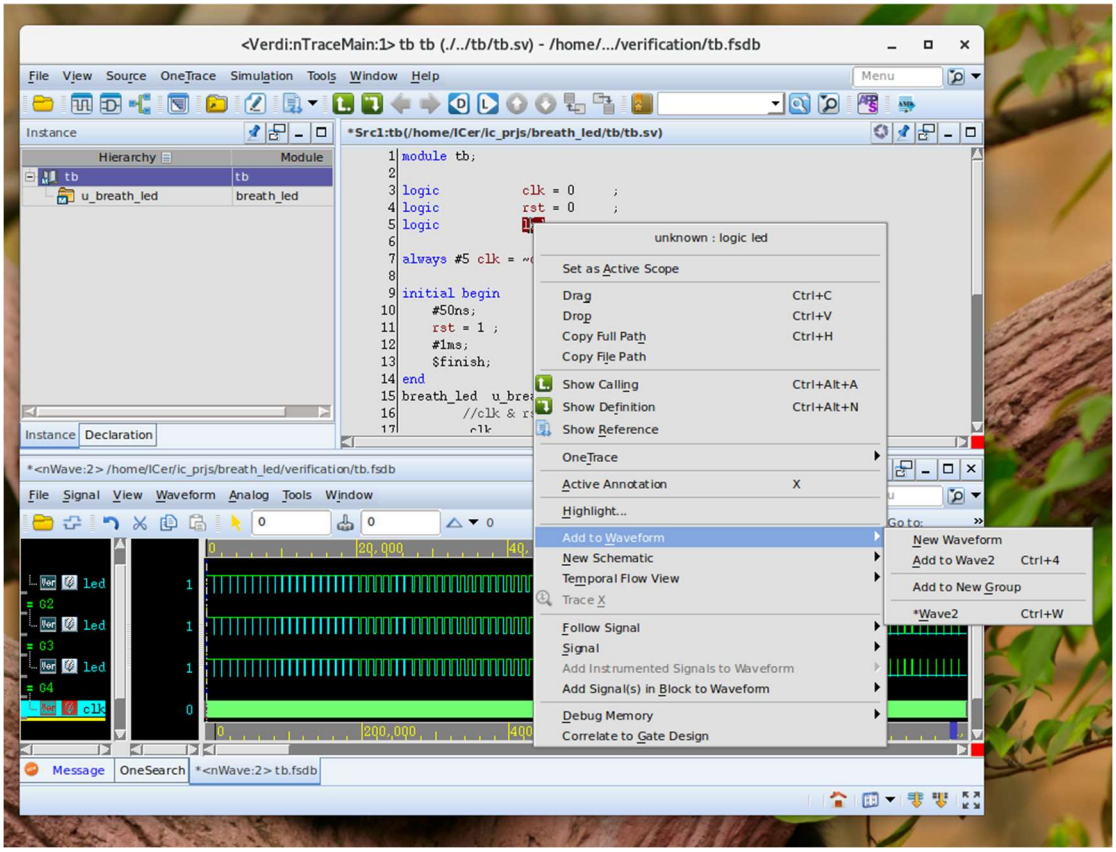
7. Run simulation by typing command “make vcs”



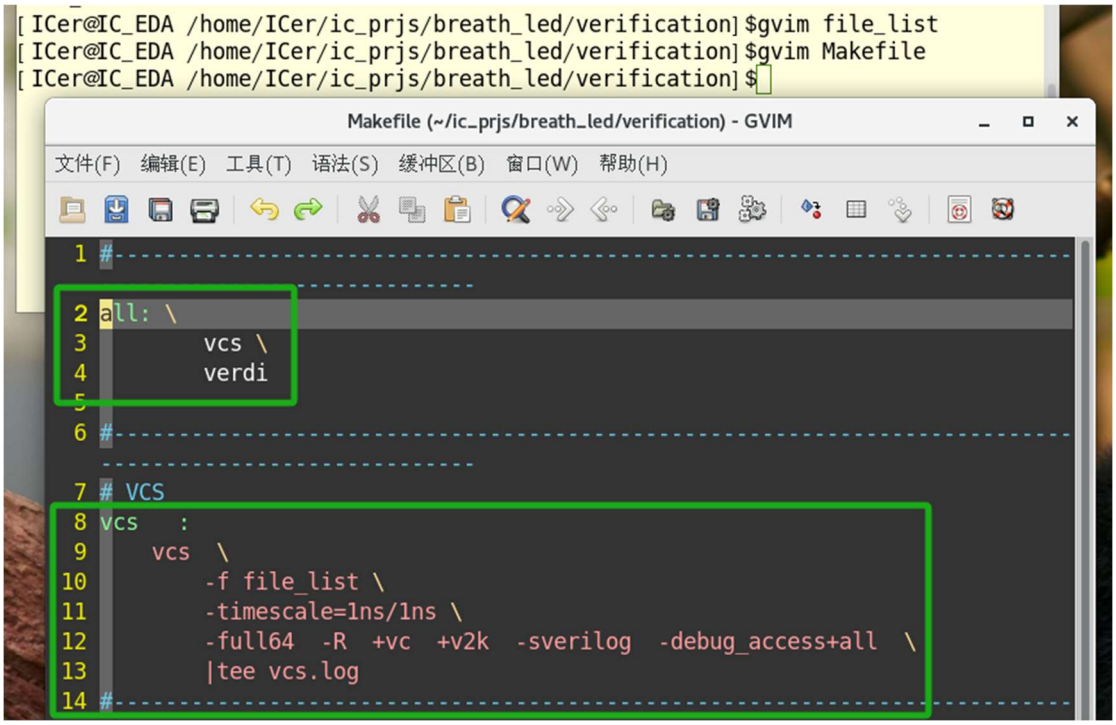
8. Open Verdi to view waveform by typing command “make verdi”



9. In Verdi, add signal to waveform, or drag a signal to the waveform window, so that its waveform will appear.



Explanation of vcs options used in this project:



-f *filename*

Specifies a file that contains a list of source files. You should specify the bottom most VHDL entity first, and then move up in order.

-f：指定一个文件，其中包含源文件的路径名列表和编译时选项。

-R

Runs the executable file immediately after VCS links it together.

-R：VCS 将可执行文件链接在一起后，立即运行可执行文件。

More options can be viewed in the following link:

https://blog.csdn.net/burningCky/article/details/111558398

https://blog.csdn.net/burningCky/article/details/111743823