#0. LicheeTang’s virtual machine image uses VirtualBox+Lubuntu1604, the default user is **lichee**, and the user password is **licheepi**

#1. There are mainly FPGA source code of E203 and BSP code of e203 in the virtual machine. You can see it in /home/lichee, LicheeTangRV\_FPGA is FPGA code, and LicheeTangRV\_Code is BSP code. Here we mainly talk about the use of BSP code

#2. Open the terminal (ctrl+alt+t)

cd /home/lichee/LicheeTangRV\_Code/sirv-e-sdk

Can be seen:



The BSP directory is mainly defined for paltform and env

**software** is some sample code

**work** is the storage location of the tool chain

Then there are some scripts run\_\*\*.sh e.g.: run\_make.sh demo\_gpio

run\_clean.sh demo\_gpio clear compilation

run\_gdb.sh demo\_gpio for gdb debugging, cooperate

run\_openocd.sh demo\_gpio use, need to open the two-terminal interface

run\_upload.sh demo\_gpio burn code to e203

The general use flow is:

run\_make 🡪 run\_upload

If you need **gdb** debugging, open the terminal:

- one to execute run\_gdb and

- one to execute run\_openocd

#3. e203 The FPGA source code seems to have a problem in the virtual machine. It is recommended to compile and download under Windows and so on.