

casperfpga python tool flow How To

Install casperfpga python tool flow (to be done before the tutorials “Connecting to the board” section)

- 1) OS Required/suggested: Ubuntu 14.04 LTS.
- 2) Open a terminal <ctrl +alt + T>. In terminal type:
“*sudo apt-get install python*”. This will install the python package.
- 3) Using the terminal, type the following:
“git clone <https://github.com/ska-sa/casperfpga>”. This will clone the casperfpga repository onto your local machine.
- 4) Using the terminal, type the following:
“git clone <https://github.com/ska-sa/katcp-python>”. This will clone the KATCP repository onto your local machine
- 5) Using the terminal, type the following:
“*sudo apt-get install python-pip*”. This will install the python pip package (package manager to install/manage python software packages).
- 6) Using the terminal, type the following:
“*sudo pip install ply*”. This will install the ply python module.
- 7) Using the terminal, type the following:
“*sudo pip install tornado*”. This will install the tornado python module.
- 8) Using the terminal, type the following:
“*sudo pip install futures*”. This will install the futures python module.
- 9) Using the terminal, type the following:
“*sudo pip install nose*”. This will install the nose python module.
- 10) Using the terminal, type the following:
“*sudo pip install unittest2*”. This will install the unittest2 python module.
- 11) Using the terminal, type the following:

“sudo pip install mock”. This will install the mock python module. Warnings may be encountered, but just ignore them.

12) Using the terminal, type the following:

“sudo pip install ProxyTypes”. This will install the ProxyTypes python module.

13) Using the terminal, type the following:

“sudo pip install numpy”. This will install the numpy python module.

14) Using the terminal, go to where “setup.py” is located under the git repo “katcp-python” folder and type the following:

“sudo python setup.py install”. This will install the setup.py python module globally, so that all the files paths are known in the environment.

15) Using the terminal, go to the “casperfpga” repository folder and type the following:

“git checkout devel”. This will change the “casperfpga” branch from “master” to “devel”. If you don’t do this then you will get a lot of “this register is seriously old” errors as you try to work with your tutorials. It may have been fixed, so try master and then if an issue go back to “devel”.

16) Using the terminal, go to where “setup.py” is located under the git repo “casperfpga” folder and type the following:

“sudo python setup.py install”. This will install the setup.py python module globally, so that all the files paths are known in the environment.

17) Proceed with the Casper tutorial tutorials “Connecting to the board” section and when you “import casperfpga” you will see no errors as all the dependencies are now met.