RandomX Hash Accelerator User Manual

Executive Summary

This user manual describes the intended use case for the RandomX Hash accelerator. Note that in the current state, the system does not quite work, but the user manual is written for the final product as if it does.
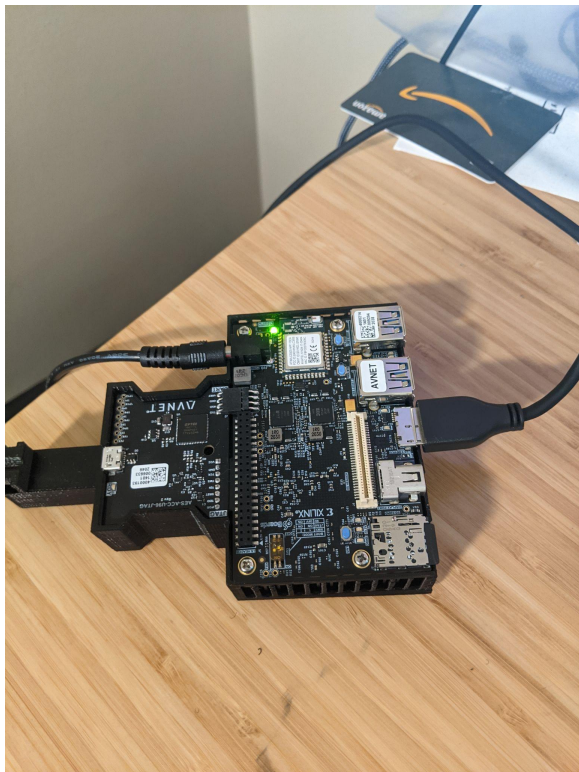
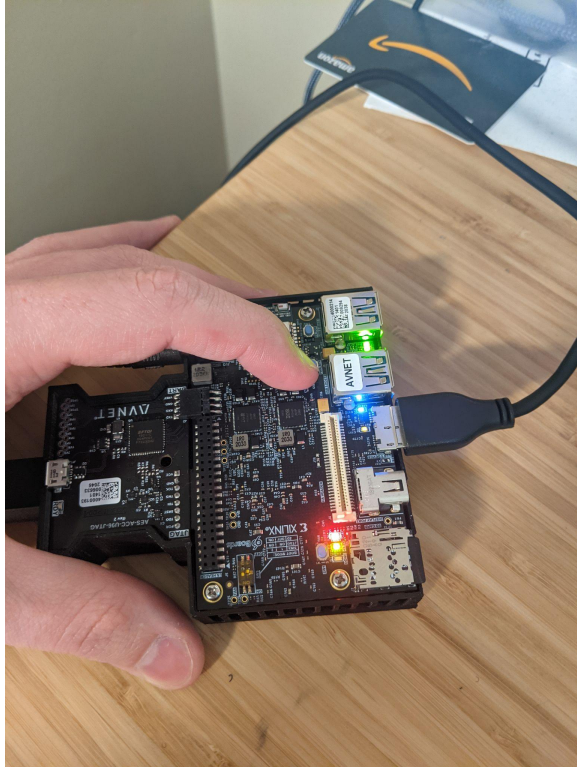## Table of Contents

Turning on the Hash Accelerator

1) Unpackage the board, and place it on the desk. Plug in the Micro-usb 3.0 cable to the board and the computer.
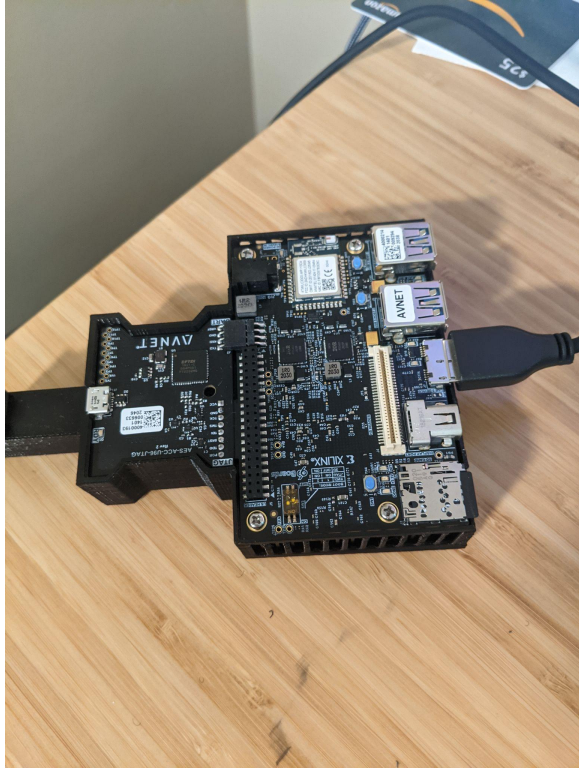
2) Plug in the power connector.

3) Press the power button to turn board on

4) Place the protective cover over the hash accelerator.

5) Launch the xmrig-fpga (note: this software doesn't exist) mining software on the Ubuntu 20.04 computer. If the install procedure was followed for those, including updating udev rules, the board will be automatically detected and used to accelerate.

Using the Hash Accelerator

1) Setup the udev permissions on your linux machine that will run the miner in order to allow the modified version of xmrig (called xmrig-fpga) to communicate with this board.
2) Follow the setup procedures in the section above, called "Turning on the Hash Accelerator"
3) Launch xmrig-fpga on the linux machine. If everything is setup properly, xmrig-fpga will auto-detect the board and begin sending RandomX hash computations to the accelerator board

Developer User Manual

Web Documentation

This project uses Doxygen. Auto-generated documentation can be found at
https://wwerst.github.io/randx_fpga/files.html

Github Readme

The Github Readme.md file has lots of informative information about the folders in the system, as well as code style guides. See:
https://github.com/wwerst/randx_fpga/blob/main/README.md

Other Docs

Additional documentation is located in the docs folder of the repo:
https://github.com/wwerst/randx_fpga/tree/main/docs