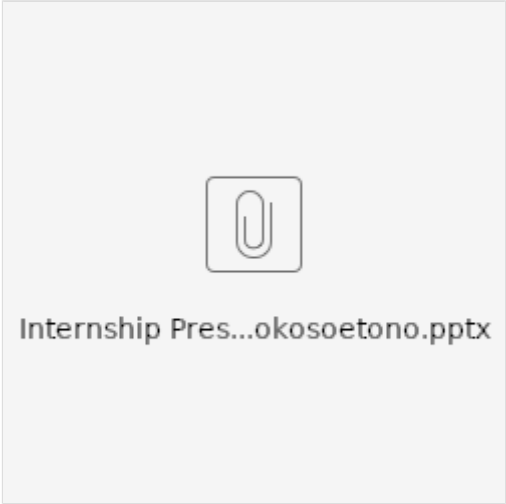
Project Logs - CSAL on Juno r2

UPDATE 30/3/2022:

Tomorrow's supposed to be my Last Official Day at ARM. I just wanted to let you know that I will host these slides on this personal repository I've made, in the event that this page gets taken down: github.com/rakhadjo/ptug-at-arm. You can find my slides there and also the report I've written as part of my university module.

Thank you everyone

UPDATE 22/9/2022: Project finished, here are the presentation slides:



This is a learning diary meant to reflect the important concepts learnt in throughout the development stage. The main goal as I've understood of the project is to be able to access CoreSight components (through the CSAL repository) on the Juno Board. The following pages will describe setup procedures, tasks, personal achievements and overall general learning.

NB - personal note - this will be the main point of reference for the COMP40901.

This document is based on this setup document, but with a few changes. It's a guide created by Rakha Djokosoetono outlining the many barriers experienced along the way and working around them. Additionally, this document also assumes that the user will be using a Linux Distribution installed on a VirtualBox in a Windows instance.

Flashing new Kernels

The USB-B to USB-A connection between the host PC and the Juno allows the board to act somewhat as a USB mass-storage device. Common workflows have involved copying the contents of `<workspace>/arm-reference-platforms/recovery` to the root directory of the connected mass-storage, and the intended kernel within the `arm-reference-platforms/output/` directory into the `/SOFTWARE/` directory of the device.

Some kernels (e.g. Linux) are not output to the aforementioned `/output/` directory, however. This is currently under test.

Juno Platform Software Initialization- `repo` Python bug workaround

Chances are you'll be directed to this document but chances are you will experience errors when running the `repo init` step. This is because the repository hosted on Linaro is targeting Python3 code, whereas the `repo` module relies on Python2, hence causing syntax errors. Particularly on Line 79 of the `main.py` file.

The current workaround would be to delete your current Python2 installation and make a SymLink to the Python3.6 installation:

```
sudo rm /usr/bin/python
```

```
sudo ln -s /usr/bin/python3.6 /usr/bin/python
```

In that order. Before reaching the `bitbake` step, be sure to delete that SymLink and restore your Python installation

```
rm /usr/bin/python
```

```
sudo apt-get install --reinstall python-minimal
```