

BEAGLESCOPE

Developer : Zubeen Tolani
<zeekhug@gmail.com>

Empower your beaglebone

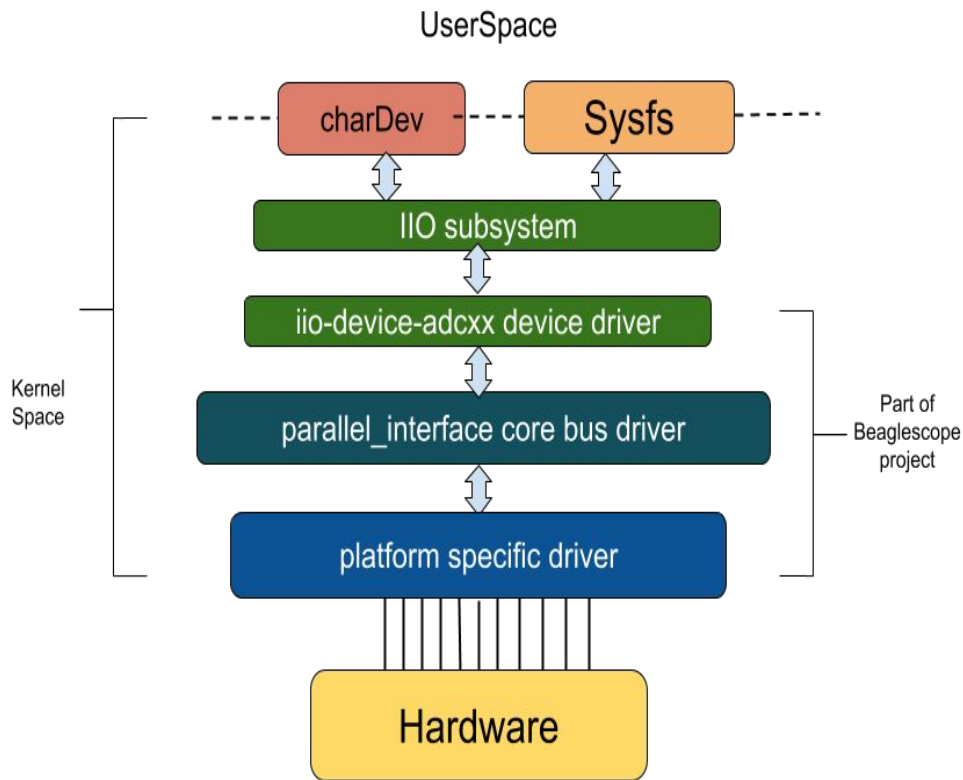
SUMMARY

- Bootstrapped as a GSoC-2016 project under **BeagleBoard.org**.
- Uses the 2 SoC Programmable realtime units (PRUs) to interface a IIO device using parallel data interface.
- The software adds a sort of 13 bit wide parallel data bus to the board with a few limitations.
- Uses well known IIO subsystem to provide user interface.
- Modular and generic software stack so as to provide highest level of customization and further development specially to kernel hackers.
- The software stack developed can be used for applications like: Oscilloscope, Ultrasound scanners, Software defined radios etc.

OVERALL WORKING

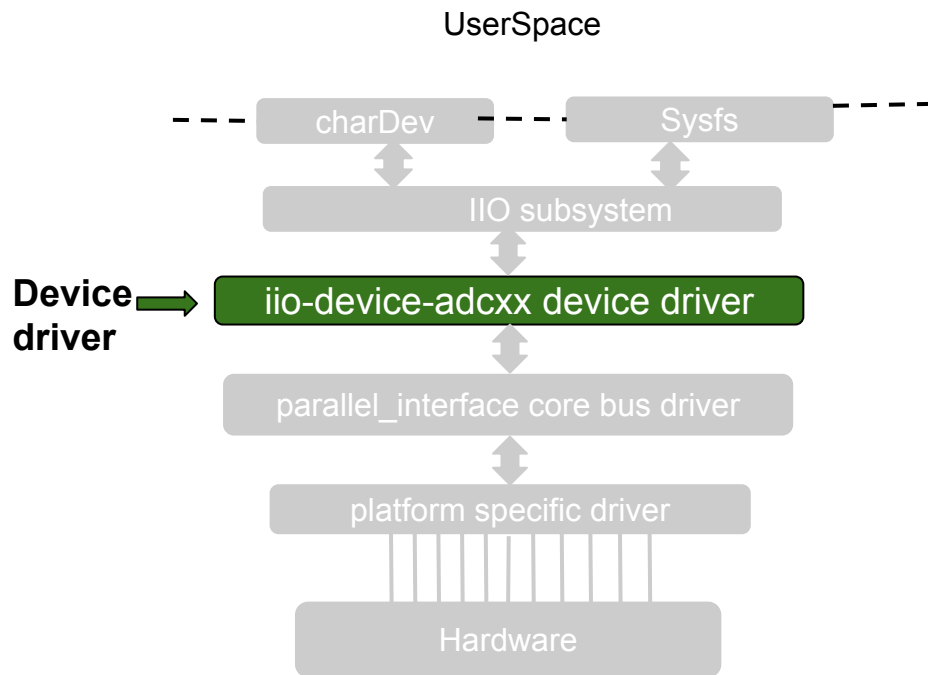
The overall working is divided into 3 parts:

1. The iio-device driver
2. The parallel_interface bus driver
3. The platform specific driver.



FOR USERS:

- The users need to worry about just one thing :
“If there is a device driver for the device they want to use ?”
- The beagle-scope project also aims to develop device driver for the DC782A-P adc board.



HOW TO USE

- Just as you would use an IIO device. Some example and docs can be found:
 - https://kernelnewbies.org/IIO_tasks
 - <http://www.at91.com/linux4sam/bin/view/Linux4SAM/IioAdcDriver>
 - <https://wiki.analog.com/software/linux/docs/iio/iio>

IT SUPPORTS :

- Supports reading raw data.
- Supports buffered capture using IIO buffers.

RELEVANT HYPERLINKS

- Project Source : <https://github.com/ZeekHuge/BeagleScope>
- Project Wiki : <https://github.com/ZeekHuge/BeagleScope/wiki>
- Blog : <https://www.zeekhuge.me>
- GSoC project :
<https://summerofcode.withgoogle.com/projects/#5391975498907648>
- Organization : <https://beagleboard.org>
- Developer's Contact : email at zeekhuge@gmail.com