# BeagleScope

project

beagleboard.org™

# BeagleScope

#PRUSSv2 - Am33xx

#Open Hardware - Beaglebone black

#Open Operating System - Linux

- For students
- Hobbyists
- Electronics Lovers

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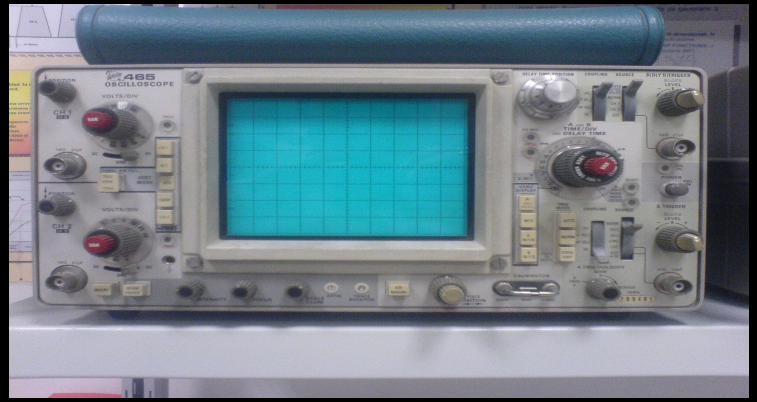
- Generic
- Modular
- Ready to use

# Example applications:

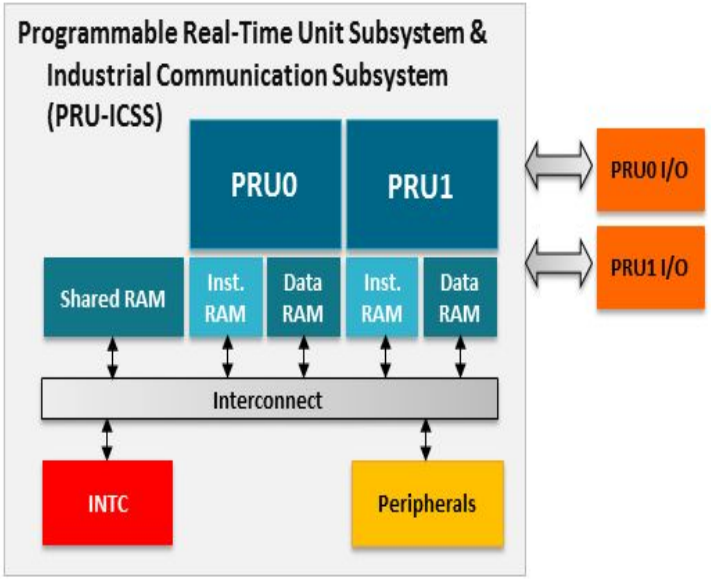



Oscilloscope

Ultrasound scanners

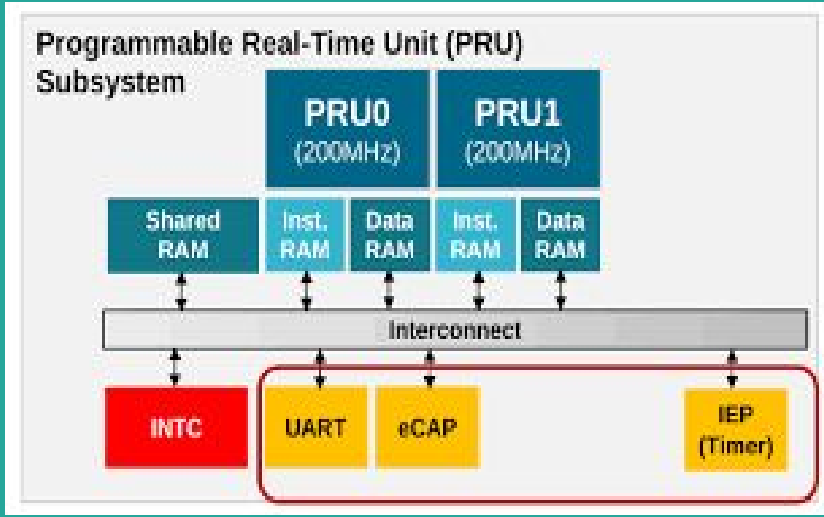
# Programmable Real-time Unit Sub System ( PRUSS )

- Two 32-bit 200MHz real-time cores
- Independent from the MPU
- No caching or pipe-lining, 100% predictable timings
- Most commands executing in a single cycle
- Connected to various peripherals memories, interrupt controller
- Can toggle the GPIOs at about 50MHz max



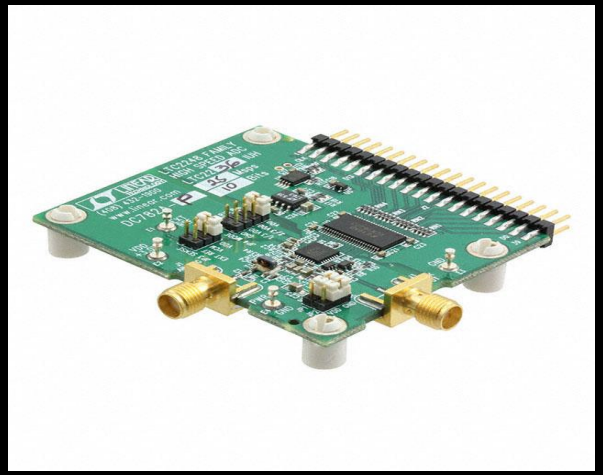

<= PRUSS - I/O

PRUSS - Peripheral connect =>

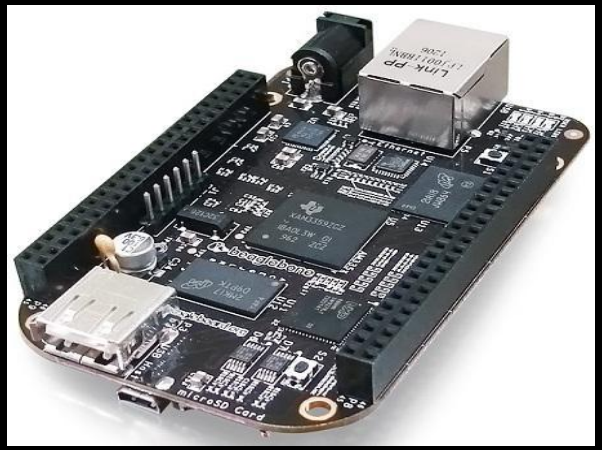


Now back to the project.

# Hardwares used:



DC782A-P-ND



BeagleBone Black

# How will the project go ?

# The project will be in the form of a parallel bus

## Consists of

-- Bus driver

-- Subsystem

-- Device driver

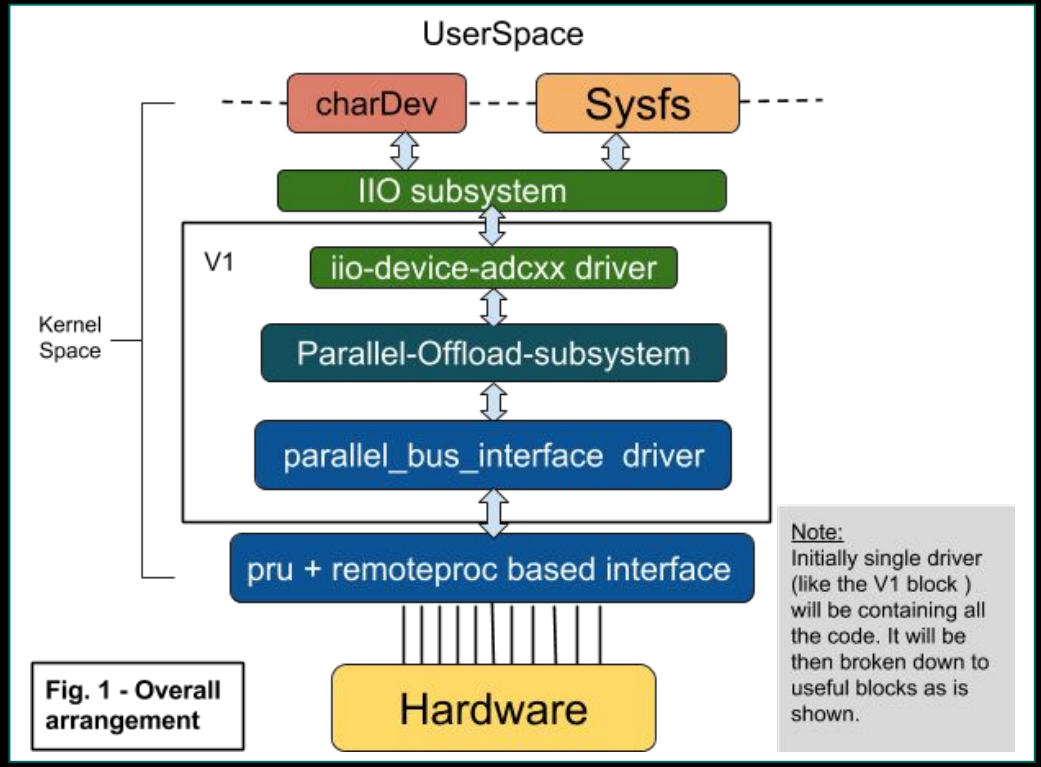



**Fig. 1 - Overall arrangement**

# Bus driver

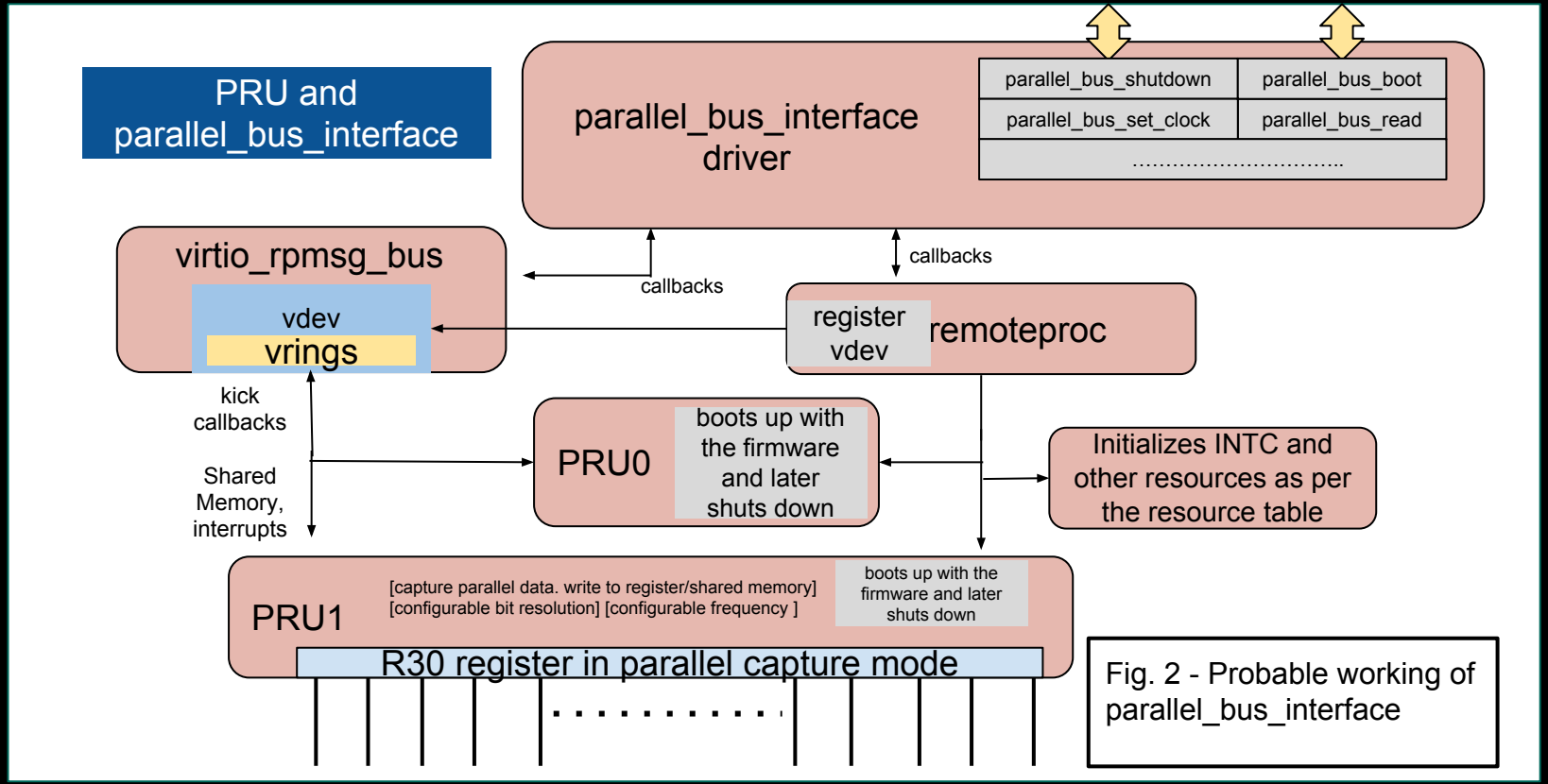



Fig. 2 - Probable working of parallel_bus_interface

# Parallel offload Subsystem

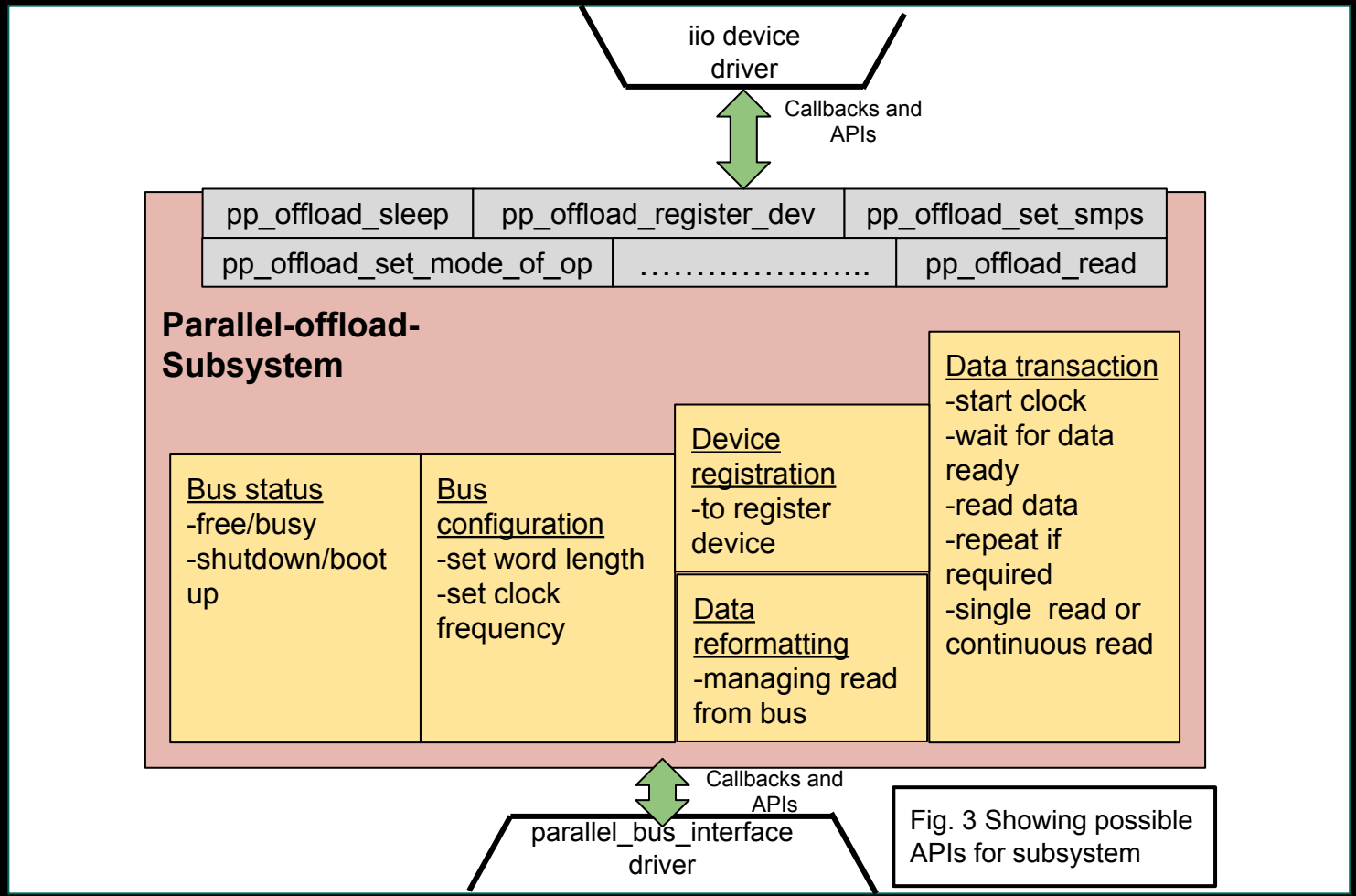



Fig. 3 Showing possible APIs for subsystem

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- Love coding and electronics
- Worked on Embedded system, Linux, Android and iOS

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## project

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