



**Linaro
connect**
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Setting up boards in farm About what do we have to take care ?

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Feedback on PMWG farm setup

- Share the different issues with faced when enabling CI power
- Gather other experiences
- At now:
 - 2 hikey960 : less than 5% of difference between boards
 - 2 hikey: still working on fixing power offset



Power consumption measurement

- Available probes points
 - UC ranges and targeted precision
 - Available power probes: AEP, NI-DAQ
- What are we interested in:
 - SoC and direct peripherals like DDR
 - Filter “noise”
 - wifi and other external peripherals
 - Fan connected on 5V
- Check connection
 - Right probes ordering
 - Shunt resistor values
- Calibrate probes



Daughter board and connectors

- Remove all daughter boards and useless dongles/SD
 - Favor FDTI cable
 - Prevent things like sensor board
 - ATMEGA328 w/ FW
- Heatsink and fan
 - Make sure to have the same configuration
 - Same Heatsink
 - Same flow rate for the fan
 - Fan on 5V voltage domain



The board itself

- Make sure to use at least same version
 - Ram size
 - Emmc size
- Get them from the same batch if possible



The tests

- Let board cooldown between test
 - Even with a fan
- Enough iterations
 - Mitigate deviation between iterations
 - Filter outlier results

