



App Note

Measurements Procedure

Issue: Subject to changes
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Reference: ICCUBBoardsDocumentation
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List of Tables

No se encuentran elementos de tabla de ilustraciones.

1 Measurements Procedure

This document briefly explains the steps that user needs to follow to perform measurements.

1. Wear an anti-static bracelet to handle the board. The omission of this step may produce permanent damage to the ASIC or any other components in the board.
2. Prepare the setup: connect the external boards required for your test. E.g. SiPMs, external SPI, etc.
3. Connect the power supply connector for low voltage (LV) pins to the low-voltage recommended to the board. If you are not sure, please contact SiUB support: support@siub.ub.edu
4. Connect the power supply connector for high-voltage (HV) pins to the low-voltage recommended to the SiPM. The maximum HV that accept SiUB boards is 100V normally, if larger HV is needed, please contact SiUB support: support@siub.ub.edu
5. If the board needs to be connected to a PC, use a USB cable to an available port on a computer. Sometimes connection may fail due a to low quality or broken USB cable.
6. Configure the electronics (this will depend on the user board usage profile).
7. Use the oscilloscope to measure the different output signals.



IMPORTANT: Please do not **POWER ON** the board without limiting the LV and HV supply source current. In case of doubts, please contact SiUB support: support@siub.ub.edu

- a. Limit the **LV** supply source per board. Check the user manual of the board used to see the maximum allowed current.
- b. Maximum current limit for **HV** supply source is **1 mA (max.)**.



IMPORTANT: Please do **not** power the board only from the USB port.



IMPORTANT: Please do not turn **ON** the LV when the **HV** is at 0 V, always make sure that **HV** is at 2V, never lower.



IMPORTANT: Never leave the board power **ON** with **HV** at 0V.



IMPORTANT: Please never short circuit the diode **ANODE & CATHODE** pins of the SiPM readout board during any kind of measurements.