

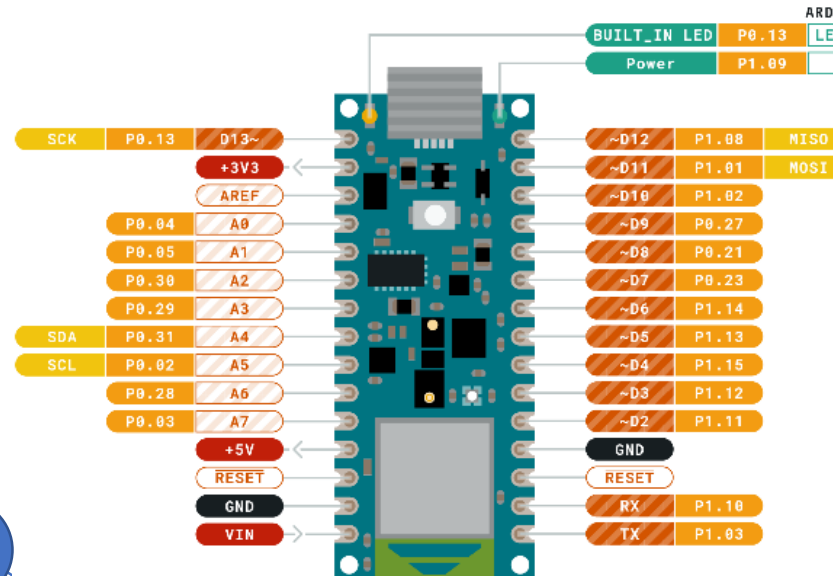
Power supply and board protection tutorial

Frédéric Bouquet
Gautier Creutzer

[Physics Reimagined](#)

Laboratory of Solid State Physics
Paris-Saclay University

October 2020

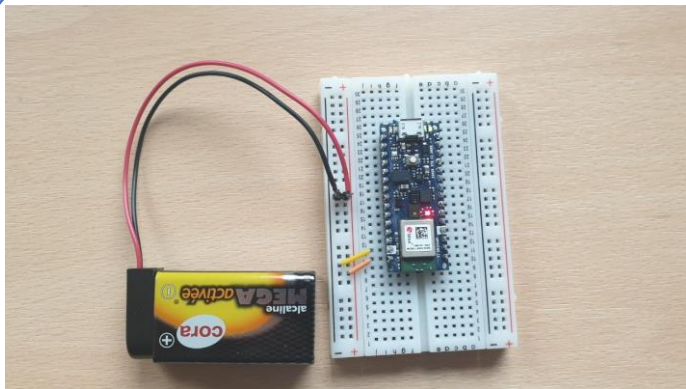


1

The Arduino Nano 33 BLE Sense board can be powered by a computer via a USB port, but then it loses the advantage of being easily usable for physics experiments.

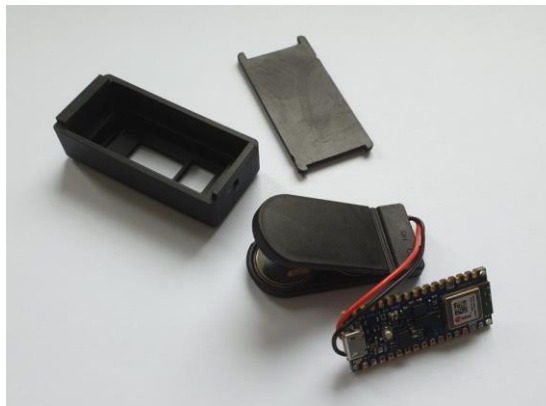
To compensate for this, it is possible to connect it to cells or batteries delivering between **4.5V and 21V**.

Typically, two coin cell batteries (3.3V) in series or one 9V battery are suitable. In this case, connect the + pole to the VIN pin in the opposite diagram, and the - pole to the GND pin.



An example is also given in the picture above. It is of course possible to solder the wires to the board for more compactness.

2



We have chosen to power ours with [this reference](#) and CR2032 coin cell batteries to benefit from an integrated on/off button.

3



If you have access to a 3D printer, we have also made plans for a quite solid case with a lid, which can hold the card and the previous battery box. They can be downloaded from our site, in Tutorials and Programs.

4