

## Batteries, Pins and board LEDs

- Batteries: the Nano 33 IoT has no battery connector, nor charger. You can connect any external battery of your liking as long as you respect the voltage limits of the board.
- Vin: This pin can be used to power the board with a DC voltage source. If the power is fed through this pin, the USB power source is disconnected. This pin is an INPUT. Respect the voltage limits to assure the proper functionality of the board.
- 5V: This pin outputs 5V from the board when powered from the USB connector. Note: for it to work, you need to short the VBUS jumper on the back of the board. If you power the board from the VIN pin, you won't get any regulated 5V and even if you do the solder bridge.
- 3.3V: This pin outputs 3.3V through the on-board voltage regulator. Note: for ultra low-power functionality, you should cut the 3V3 jumper on the back of the board, and use an external battery at 3V3.
- LED ON: This LED is connected to the 5V input from either USB or VIN.
- I2C pins: As opposed to other Arduino Nano boards, pins A4 and A5 have an internal pull up and default to be used as an I2C Bus so usage as analog inputs is not recommended.