Sentry

* **DEVICES:** SAMD21 XPRO, ADXL345
* **Function:** Set the length of password through console by keyboard.Then you can set password for chip through ADXL345,and then you can unlock it by moving the ADXL345 with three opportunities. The password can be randomly organized by 6 gestures we define.If you successfully unlock it, you will see the LED light blink and the “you are successfully unlock it” shown in console. And after three times fail to unlock it. You get chance to reset your password.
* **Chip place in palm:** ADXL345 will be placed in the palm, shown in pic1 and pic2.

A picture containing person, indoor, computer, table

Description automatically generated A picture containing person, indoor, holding, sitting

Description automatically generated

pic1 pic2

* **The gestures**: The data we get from ADXL345 corresponding to the gesture shown in table1.

Table1

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Palm up | Palm down | Palm left | Palm right | Palm forward | Palm back |
| X axis |  |  |  |  | inverse | same |
| Y axis |  |  | inverse | same |  |  |
| Z axis | inverse | same |  |  | s |  |

Tips: inverse and same are relative to axis’s positive semi-axis. the output of inverse is (210-270), output of same is (65220-65400).