Vertical_pointer

1.Learning goals

In this lesson, we will learn to program in Python using the super:bit expansion board to make a vertical pointer.

2.Programming method

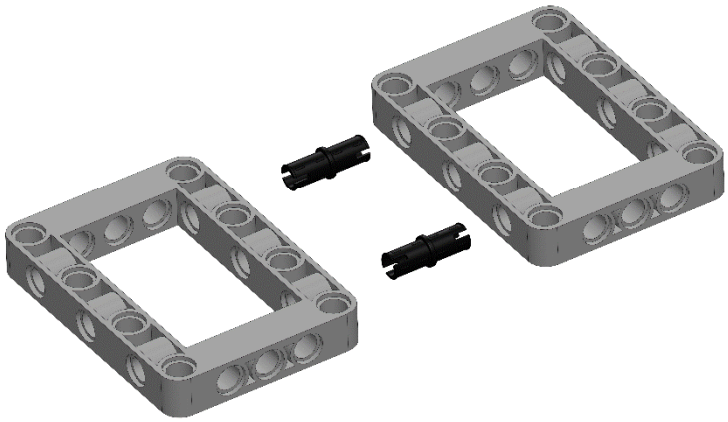
Mode 1 online programming: First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: **http://microbit.org/** to enter the programming interface. Add the Yahboom package https://github.com/lzty634158/SuperBit to program.

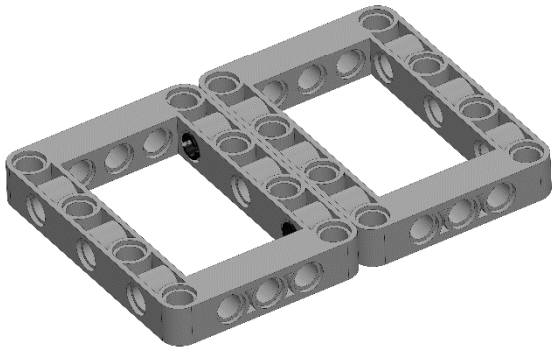
Mode 2 offline programming: We need to open the offline programming software. After the installation is complete, enter the programming interface, click【New Project】, add Yahboom package: https://github.com/lzty634158/SuperBit, you can program.

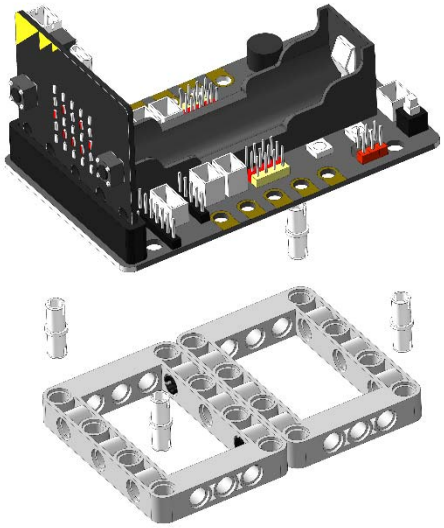
3. About program：

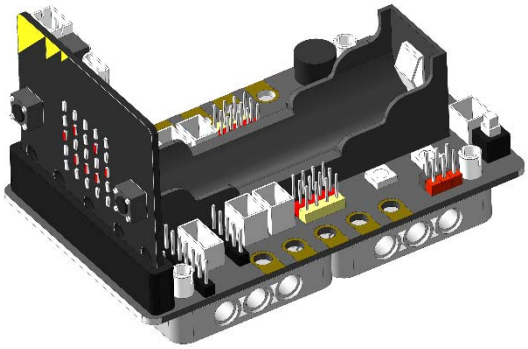
Please see **microbit-Vertical_pointer.hex** file.

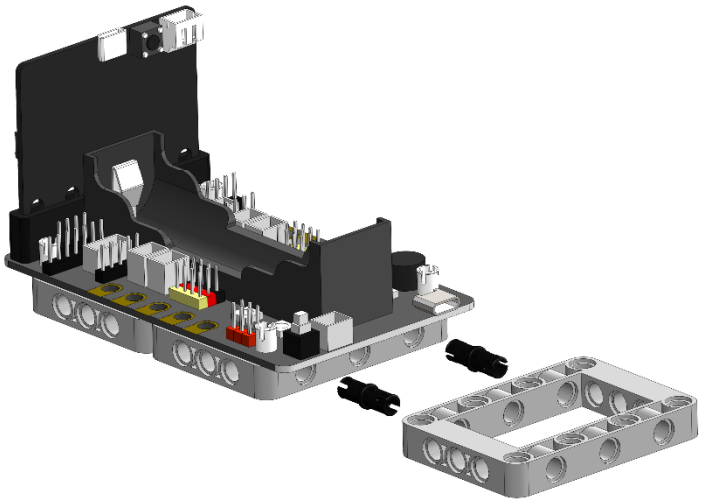
4. Building block assembly steps

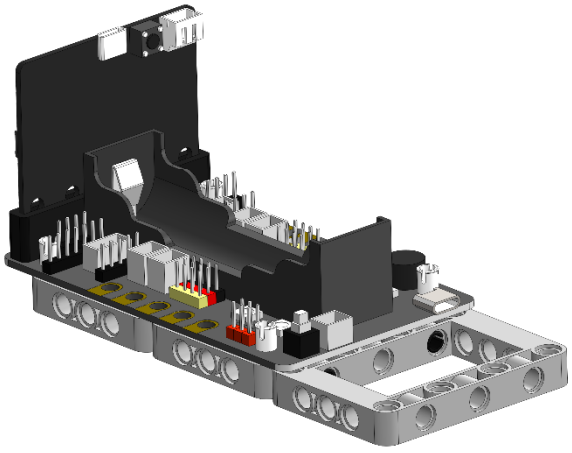


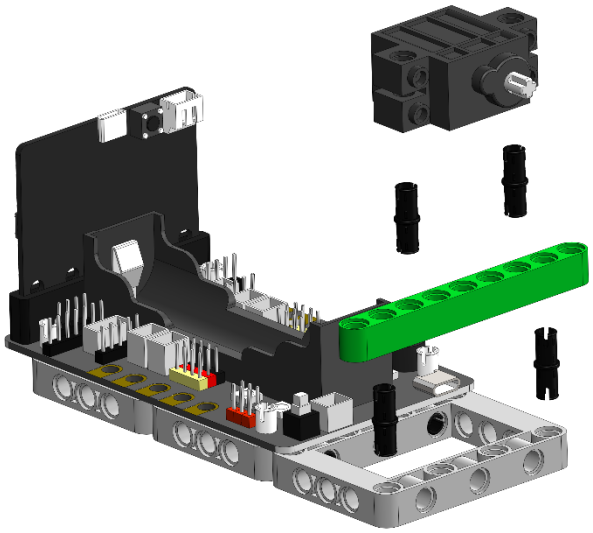


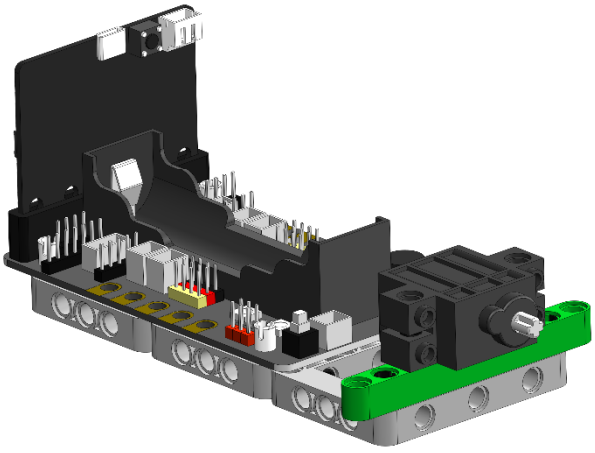


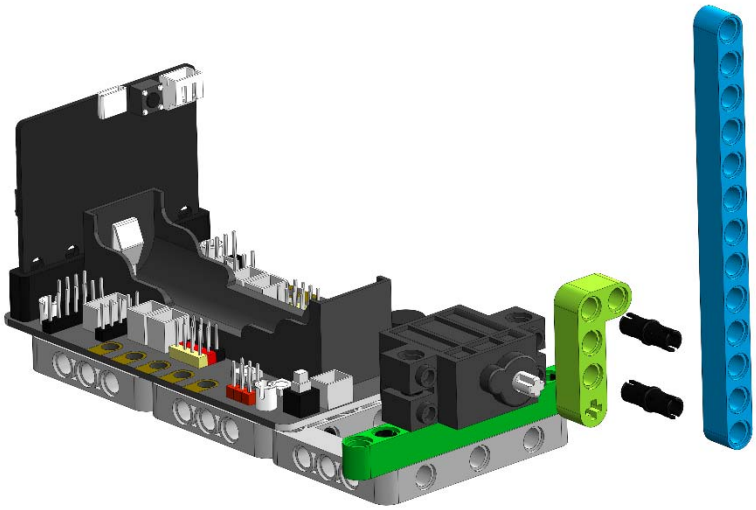


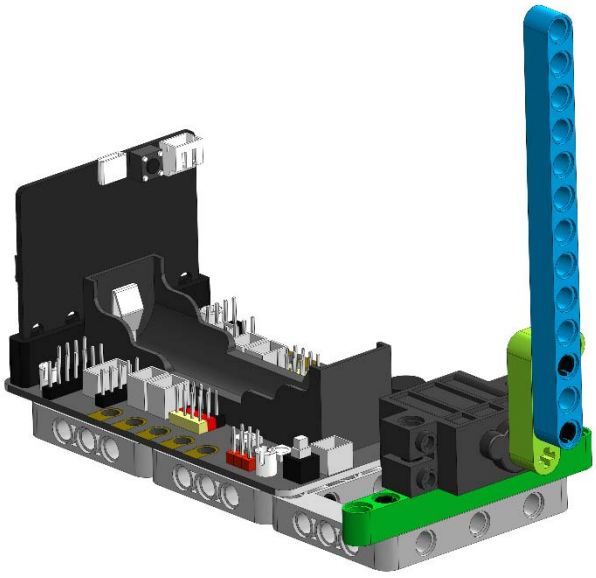












The 270° block servo connect to the S1 interface of the Super:bit expansion board. The orange wire of the 270° block servo is connected to the

yellow pin of S1, the red wire of the 270° block servo is connected to the red pin of S1, and the brown wire of the 270° block servo is connected to the black pin of S1.

5. Experimental phenomena

After the program is successfully downloaded, the micro:bit dot matrix will display the music pattern. The 270° block servo turns according to the data of the micro:bit acceleration sensor, keeping the pointer vertically upwards.

If you need to restart, please press the reset button on the micro:bit board.