

A project proposal for a self-balancing robot using stepper motors, Gyroscope Accelerometer, a Bluetooth module and Arduino Nano.

Original Project by Joop Brokking

<https://www.youtube.com/watch?v=6WWqo-Yr8IA>

<https://www.youtube.com/watch?v=VxpMWncBKZc>

Other examples of self-balancing robot using stepper motor and Arduino Nano by "My Tech Studio"

<https://www.youtube.com/watch?v=la3tgja3RZ0> by "My Tech Studio"

<https://www.youtube.com/watch?v=aUbBUd-hBLI>

<https://electricdiylab.com/diy-self-balancing-robot>

HC-05 RF Wireless Bluetooth Transceiver Slave Module RS232 / TTL to UART converter and adapter for Arduino

<https://www.aliexpress.com/item/32501958088.html> \$3

MPU6050 Module 6-Axis Gyroscope Accelerometer Arduino

IIC I2C SPI MPU-6500 6-Axis Gyroscope Accelerometer Sensor \$3.52

<https://www.ebay.com.au/itm/225072567797>

<https://cdn.sparkfun.com/datasheets/Sensors/Accelerometers/RM-MPU-6000A.pdf>

ATmega328P MINI USB Nano V3.0 CH340G 5V 16M Micro-controller board for Arduino

<https://www.ebay.com.au/itm/283932008665> \$4.80

5PCS A4988 Stepper Motor Driver Modules for CNC Rep-rap 3D Printer

<https://www.ebay.com.au/itm/225003463072> \$8.79

DIY 3D Printer Stepper Motor Axis Drive Motor for Ender3 S Pro CR10 42/40 42/34

<https://www.ebay.com.au/itm/314421527392> \$22 or \$29 for larger