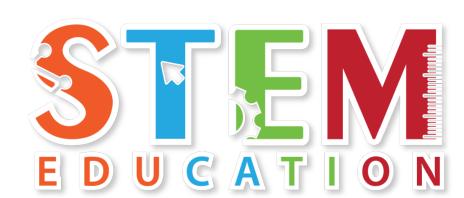
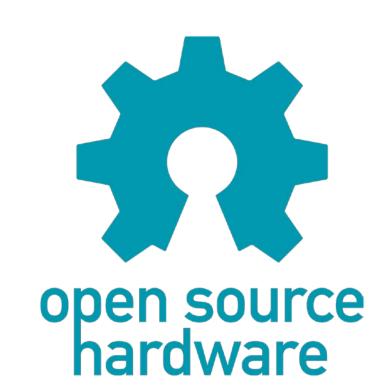




# **Robot Omni-directional Kit** for Education

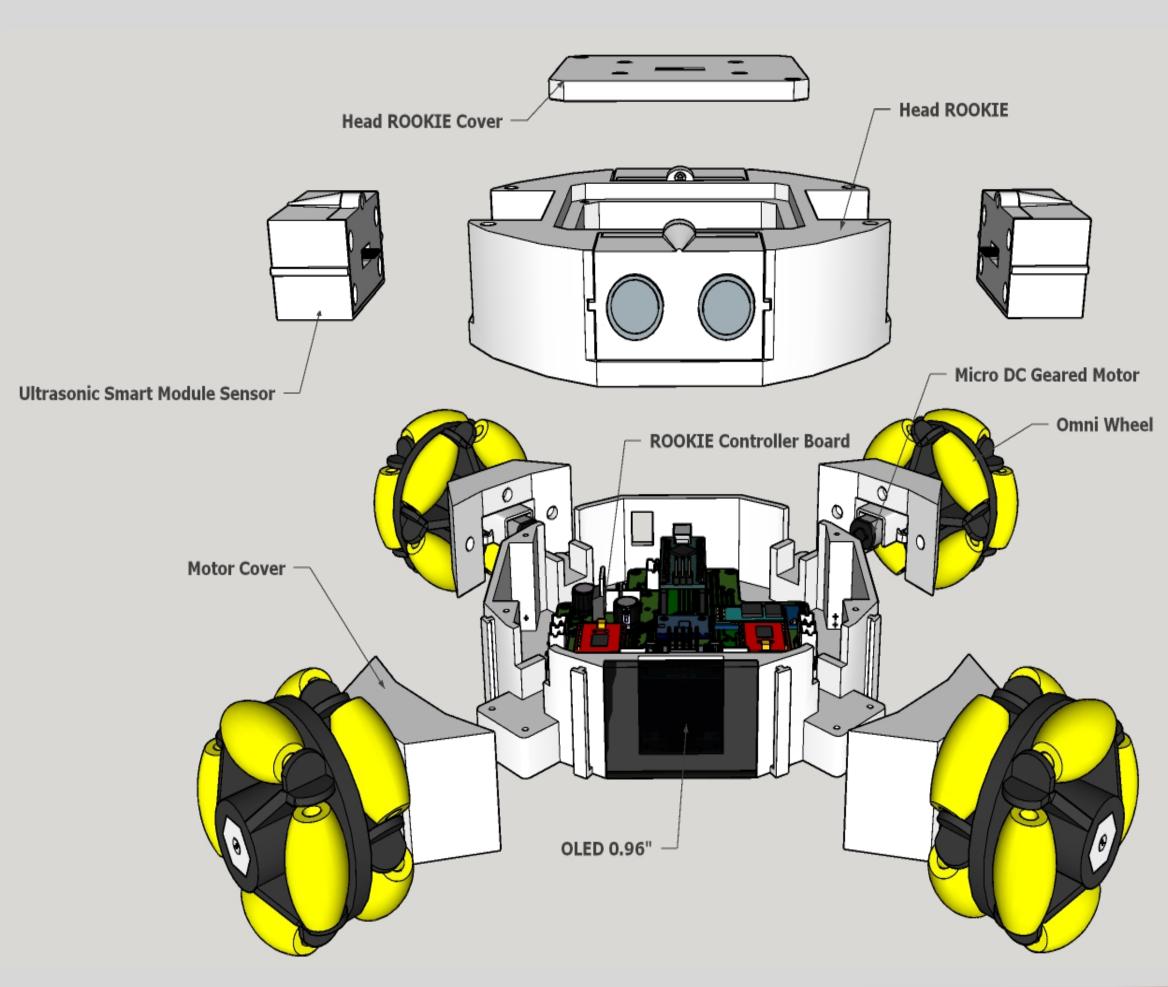


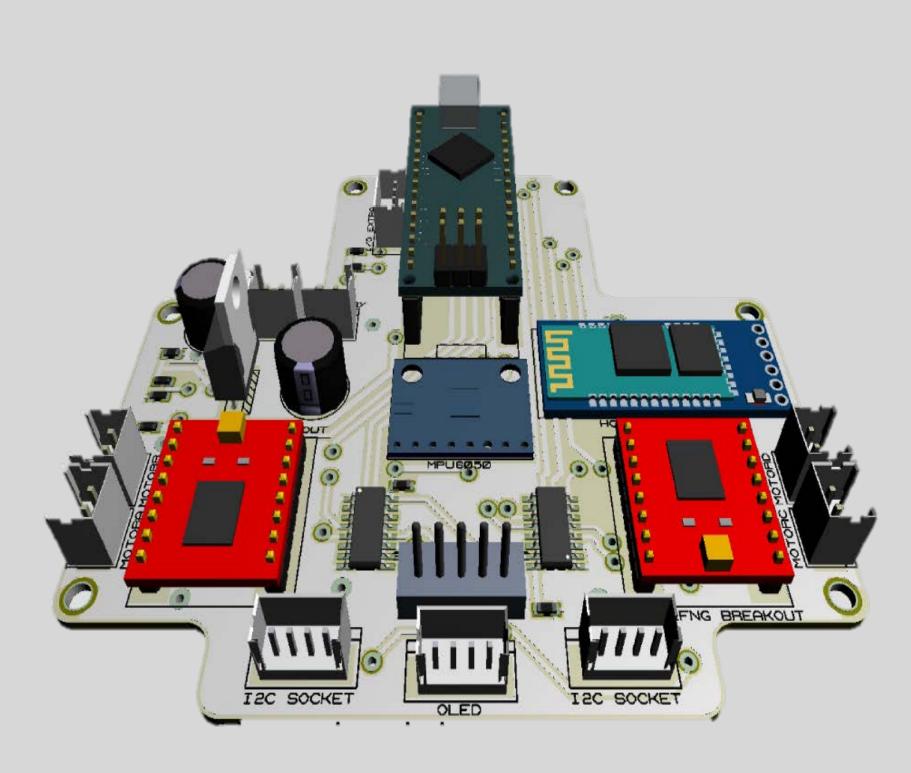












ROOKIE Development Board

### **USEFULNESS & APPLICATIONS**

- ✓ Omni wheeled mobile robot platform for STEM education and hobbies.
- ✓ Fully programmable Arduino-based controller board
- ✓ Open source hardware and software
- ✓ Programming style Arduino (script) and Visual Language Programming (VLP)
- ✓ Independent drive 4 Channel DC Motor
- ✓ Autonomous mobility or control via android and IOS apps.
- ✓ Light weight and easy to assemble mobile robot

ROI: up to 1 year

Board

1<sup>st</sup> Year Target Sales:

400 Units for ROOKIE kit

350 Units for ROOKIE Dev.

**Expected commercialization:** 

✓ Affordable mobile robot kit

### **TECHNICAL SPECS:**

- Size (280mm) x (280mm) W x L
- Weight: 0.5 kg approximately
- Power: LiPO Battery 7.4 V 1500 mAh (rechargeable)
- Motor: Micro DC Geared Motor HP 325 rpm 1.2 kg
- Motor Driver: Toshiba TB6612FNG Dual IC
- Connectivity: Bluetooth HC-05 2.4 GHz
- Processor: ATMEGA328P AU 8-bit
- Port: 1 USB Mini Type
- Display: OLED 0.96" Display
- Sensor: Modular Ultrasonic sensor, Gyro sensor, Proximity sensor
- Software: Arduino IDE
- Controller: Android Robopreneur Joystick
- Remote control or autonomous motion interactive software tailored to ability (beginner, intermediate, advance)

#### MARKETING STRATEGY

Market Area: Global and local.

**Potential Clients:** 1<sup>st</sup> phase (2018-2019)

- Young Generation
- Robotic training centre 2<sup>nd</sup> phase(2019-2020)
- GLC companies for CSR programme
  - Robotic Developer and Hobbyist

Market size and market analysis findings:

15% to 20% growth (Student population 4.6 mil in

2018)

## Soft-launching:

- Product launching
- Software launching
- Promotional video
- Use case from school trip
- Already endorsed by MIDA

October 2018 (Beta Version)

**Market Competition:** Sasbadi (Mindstorm), Cytron (RERO). Myduino (Arduino)

Location to focus: Peninsular Malaysia



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