ESP32 IMU Module V1.1

The Makerfabs IMU Module features the 6-axis MPU-6050 MEMS sensor from InvenSense. Each of these 6DoF IMU feature an ESP32 with a MPU-6050 which contains a 3-axis gyroscope as well as a 3-axis accelerometer. The MPU-6050 uses 16-bit analog-to-digital converters (ADCs) for digitizing 6 axes. By combining a MEMS 3-axis gyroscope and a 3-axis accelerometer on the same silicon die together with an onboard Digital Motion Processor™ (DMP™) .It can be used as a helicopter/quadcopter.

**Feature**

• Integrated ESP32 2.4G WiFi and Bluetooth

• I2C Digital-output of 6-axis MotionFusion data in rotation matrix, quaternion, Euler Angle, or raw data format

• Input Voltage: 3.7V Battery or 5.0V MicroUSB

• Tri-Axis angular rate sensor (gyro) with a sensitivity up to 131 LSBs/dps and a full-scale range of ±250, ±500, ±1000, and ±2000dps

• Tri-Axis accelerometer with a programmable full scale range of ±2g, ±4g, ±8g and ±16g

• Digital Motion Processing™ (DMP™) engine offloads complex MotionFusion, sensor timing synchronization and gesture detection

• Embedded algorithms for run-time bias and compass calibration. No user intervention required

• Digital-output temperature sensor

• Size: max 100mmX100mmX9mm

