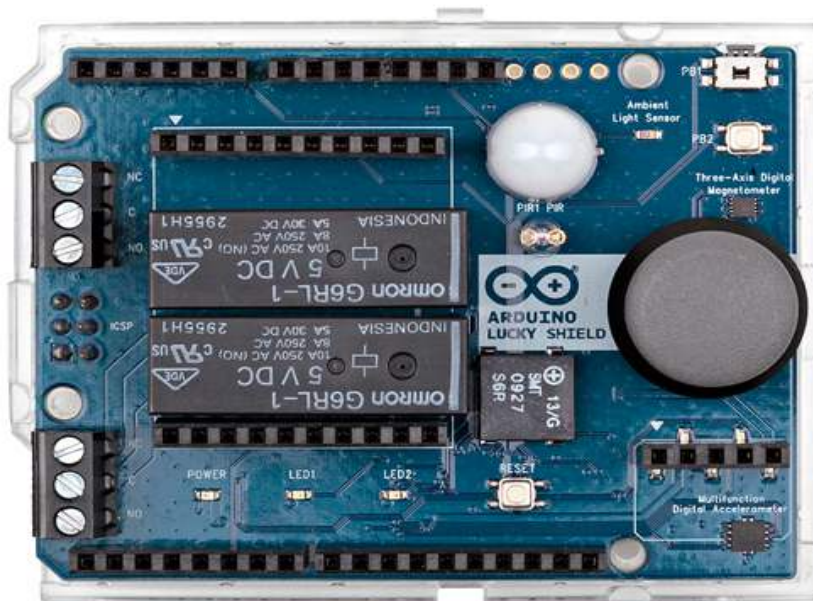# Arduino LUCKY SHIELD

You are lucky with Arduino Lucky Shield! A single shield with many sensors.

Arduino Lucky Shield is an easy way to use your Arduino boards, that grants you access to barometric pressure, relative altitude, luminosity, temperature, motion and presence. You can also turn it into a simple controller and OLED (organic light-emitting diode) display system. It is the perfect shield for IoT.

Description

Operating voltage: 3.3 VDC / 5 VDC

LEDs: POWER (Green) . LED1 (Yellow) . LED2 (Yellow)

Joystick: 5-directional tact switch

Buzzer: MINIMUM SPL 90 dBA RESONANT FREQUENCY 500 Hz

Relay: 50000 operations min (NC) at 250VAC, 8A (resistive load) 50000 operations min at 30 VDC, 5A (resistive load)

PIR sensor: Encapsulation type TO5, Spectral response 7~14μm, Transmittance ≥77%, Field of view 139º
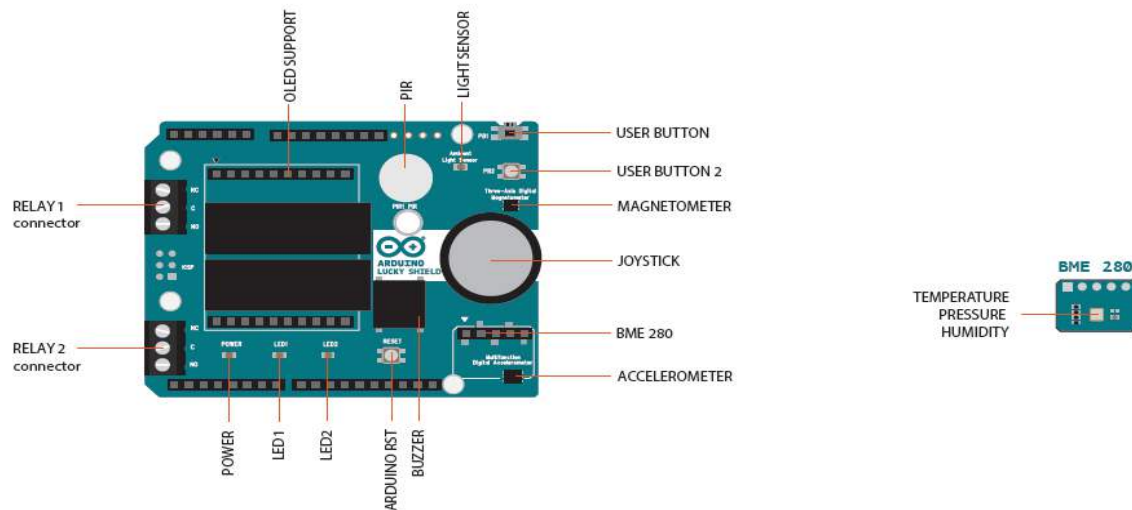
Ambient light sensor: Peak sensitivity wavelength 630nm , Operating temperature -40 ~ +85°C

Temperature / humidity: Operating temperature -40 ~ +85°C

Pressure sensor: Operating pressure range 300 ~ 1100 hPa

Magnetometer: E-compass, Full-scale range ±1000 T, Output data rates (ODR) up to 80 Hz

Accelerometer: G-sensor, Ultra-fast data output time, ~700 μs ±8g full-scale range 3-axis, 45° tilt outputs

Power

The shield doesn't need external power. It will be provided by the Arduino base board, through the 5V and 3.3V pins of the base.

Physical Characteristics

The maximum length and width of the Lucky Shield PCB are 2.7 by 2.1 inches,respectively (68.6 x 53.4 mm). Four screw holes allow the Shield to be attached to a surface or case. Note that the distance between digital pins 7 and 8 is 160 mil (0.16"), not an even multiple of the 100 mil spacing of the other pins.

Compatible Boards

The shield is compatible with all Arduino board 5V and 3.3V standards.

Overview

Arduino Lucky Shield is an easy way to use your Arduino boards, that grants you access to barometric pressure, relative altitude, luminosity, temperature, motion and presence. You can also turn it into a simple controller and OLED display system. It is the perfect shield for IoT.

FEATURES

Relays	OMRON G6RL-1 (5V DC)
PIR Sensor	MOSDESIGN M7616
Ambient Light Sensor	EVERLIGHT ALS-PT19-315C/L177/TR8
Humidity Sensor	BOSCH SENSORTEC BME 280
Temperature Sensor	BOSCH SENSORTEC BME 280
Pressure sensor	BOSCH SENSORTEC BME 280
3-axis magnetometer	NXP MAG3110
3 Axis accelerometer	NXP MMA8491Q
Buzzer	PUI AUDIO SMT-0927-S-6-R
Joystick	5-directional tact switch

GENERAL

Operating Voltage	3.3 V / 5 V
Extra	DogOLED support
PCB size	53 x 68.5 mm
Weight	0.054 Kg
Product Code	A000125