# PARTICLE PHOTON BREAKOUT BOARD DATASHEET

#### **Description**

This breakout board was designed for the enhancement of prototyping with the powerful and open source hardware the particle photon. The breakout board has an on-board voltage regulator that will supply the Photon with 5V. The board also provides additional 5V and ground pins. This breakout board can easily be used as a prototyping tool or even used in a standalone project. The recommended input voltage is 12V as the higher the input voltage the lower the efficiency of the voltage regulator will be. The efficiency of the voltage regulator can be calculated using the following equation.

$$\eta = \frac{P_{OUT}}{P_{IN}}$$

Figure 1 is a top overview of the Particle Photon Breakout Board.



Figure 1.

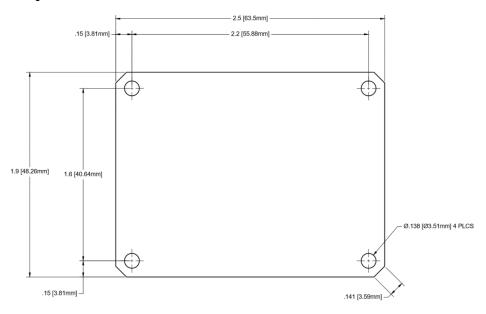
#### **Applications**

- Prototyping
- Stand Alone Projects

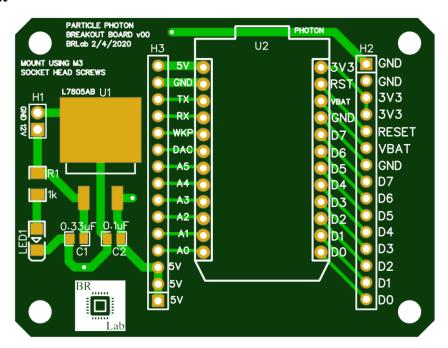
#### **Specifications**

- Voltage Regulator
  - Voltage Input: 35V max
  - Recommended Voltage Input: 12V
  - Current Rating: 1.5A max
- 5V and 3.3V outputs
- M3 mounting holes

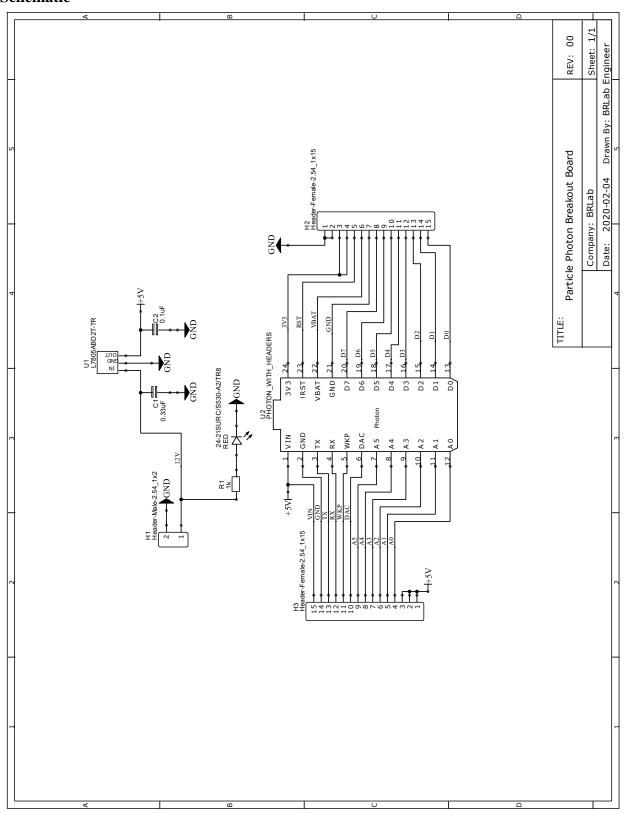
# **Dimensional Specifications**



## **Board Layout**



# **Schematic**



# **Revision Changes**

V00 – Initial Release

## **Contact Info**

For comments or concerns feel free to send them to <u>brlabelectronics@gmail.com</u>.