

# DATASHEET

## Custom PCB

### Indicators:

Dim White (LED #1): Powered On  
Bright White (LED #1): Program Running  
Off (LED #1): Powered Off

Red (LED #2): 0%-33.33% weight range  
Yellow (LED #2): 33.33%-66.67% weight range  
Green (LED #2): 66.67%-100% weight range  
Off (LED #2): Program Halt

**LED #1**

**LED #2**

*Note on Load Cell Wires:*

Separate connections are made typically since the wires of the load cell are too fragile to be permanently soldered on the PCB, causing wire strain and irreparable damage to board functionality if broken, or snapped. Hence use this datasheet to make safe reconnections everytime upon disconnect/use.

The wires are originally bundled and placed in the enclosure, but this is a safety feature for the load cell wires, and it also ensured PCB universality

### Load Cell Unit

Pins: (LEDs in Top Right) (L→R)

1 = E+ → Red

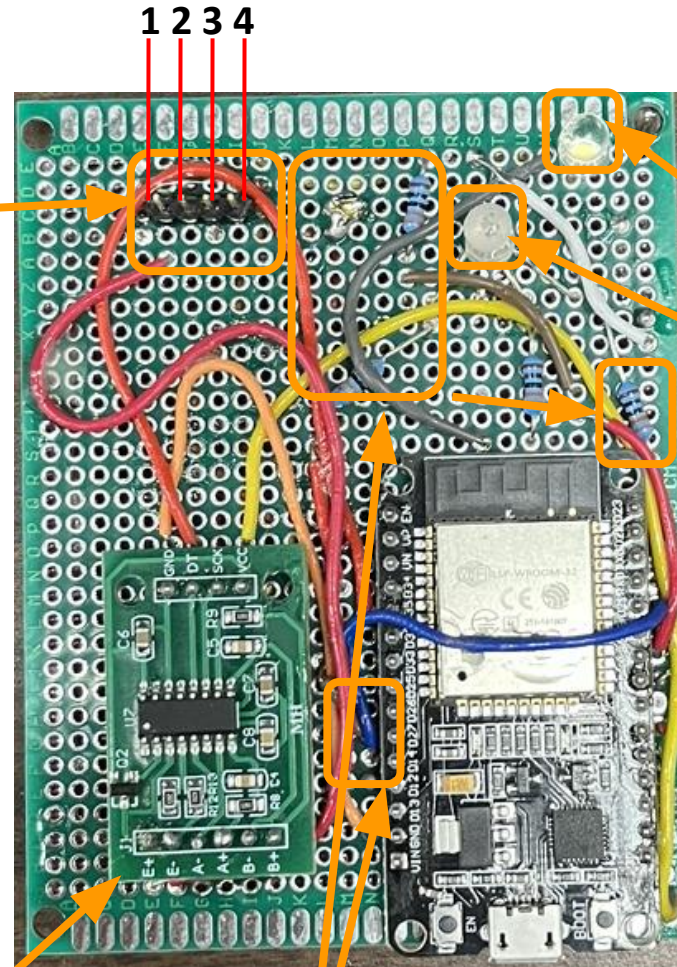
2 = E- → Black

3 = A- → White

4 = A+ → Green

(Board → Load Cell Wire Color)

Power: USB G in ESP 32 Port



**HX711 Amplifier**

**Resistors and Wires**

**ESP 32**

# SYSTEM DIAGRAM

- L1: LED #1
- L2: LED #2
- R: Resistors (330 Ohms)
- DISPLAY: 4-bit barcode bmp files
- Pink wire: DT, SCK, Power, A+/- Connections
- Red Wires: RGB/On Connections
- Blue Wires: GND (0V)
- Brown Wire: Load Cell Analog A+/A- (Pins)
- Green Wire: USB - B (Power On)

