

# Assembly Steps

August 2017 | VIVA PIC16 REV. 4 | Nolan Manteufel

## Step 1. Resistors

- THD: R1, R2, R3, R4, R5, R6, R7
- **SMD:** R8, R9, R10

## Step 2. PICkit3 Pins

- THD: 6-pin PICkit3 connector

## Step 3. Tactile Switch (pushbutton)

- THD: 6mm

## Step 4. LEDs

- THD: 3v3 LED, 5v0 LED, Hello World LED (polarized: “more lead, more voltage”)
- **SMD:** RGB LED (polarized: pin 1 indicated)

## Step 5. Capacitors

- THD: C1, C2 (polarized: “more lead, more voltage”)

## Step 6. Headers and Pins

- THD Headers: UART, SPI, I2C, ADC, PIC16 Breakouts
- THD Pins: VIN Selector Pins, VDD Selector Pins
- **JIG:** Use a jig.
- **FLUX:** Use an adequate amount of flux.
- **HEAT:** Be sure to apply enough heat. Consider increasing the soldering iron’s temperature.

## Step 7. PIC Microcontroller

- THD: PIC16F1829

## Step 8. Power Connector

- THD: 2.1mm DC Jack

## Step 9. Power Switch

- THD: ON/OFF Switch

## Step 10. 2xAAA Battery Pack

- THD: Battery Pack

## Step 11. Voltage Regulator Assembly

- THD: 4-pin Voltage Regulator Assembly