

6. Schematics

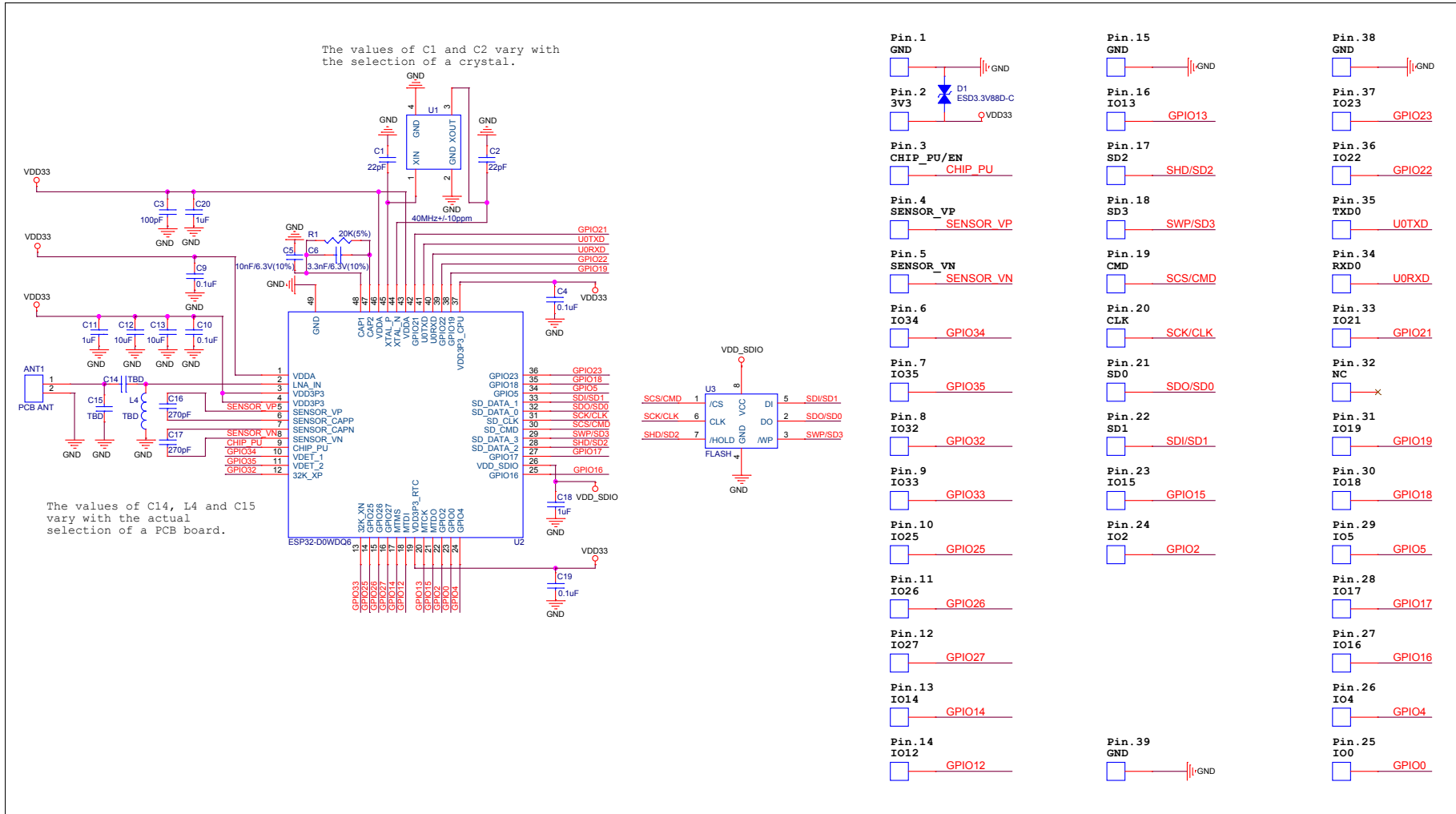


Figure 3: ESP32-WROOM-32 Schematics

7. Peripheral Schematics

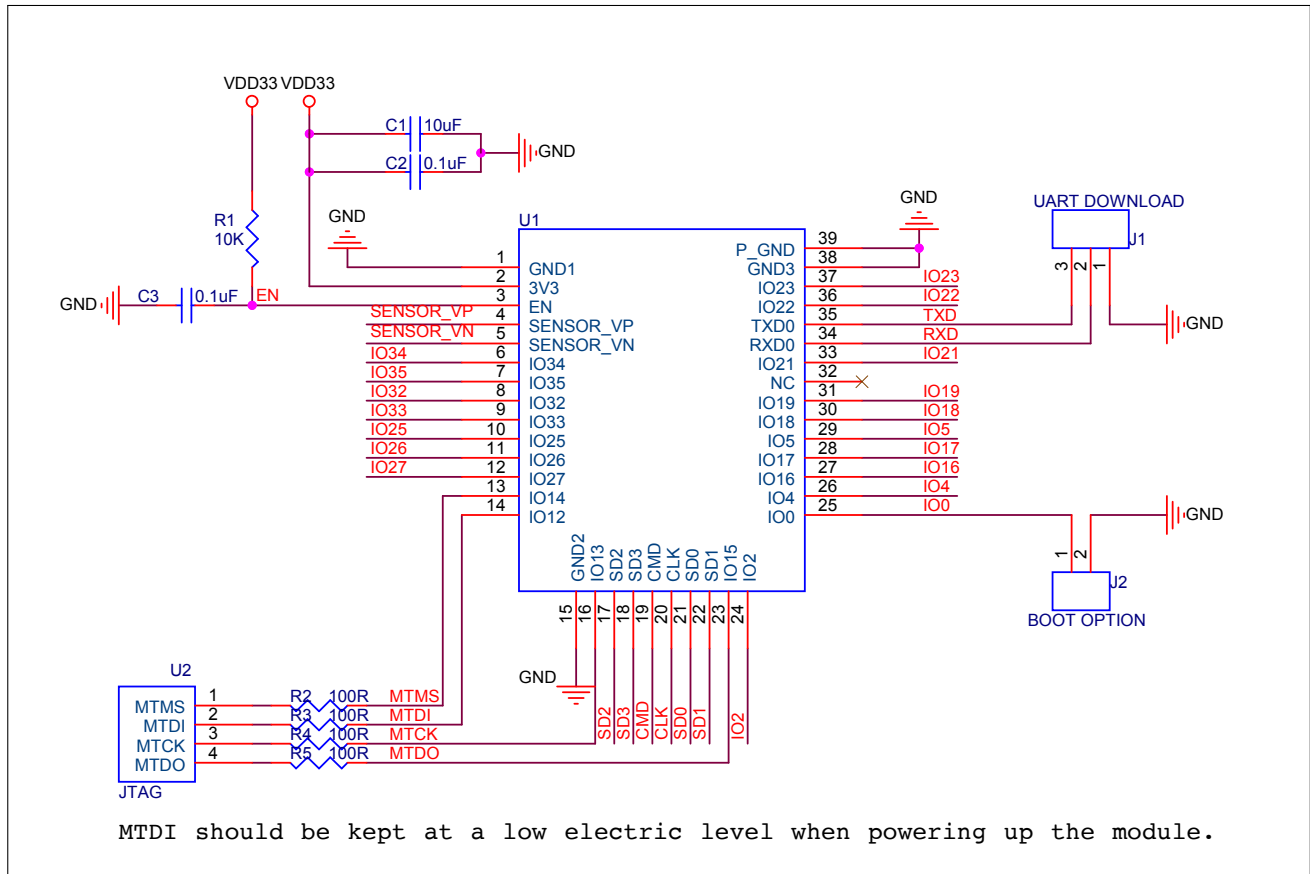


Figure 4: ESP32-WROOM-32 Peripheral Schematics

Note:

Soldering Pad 39 to the Ground of the base board is not necessary for a satisfactory thermal performance. If users do want to solder it, they need to ensure that the correct quantity of soldering paste is applied.

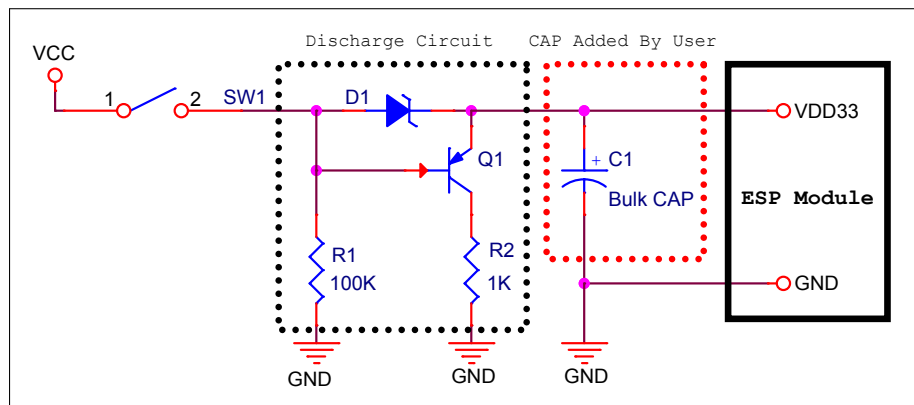
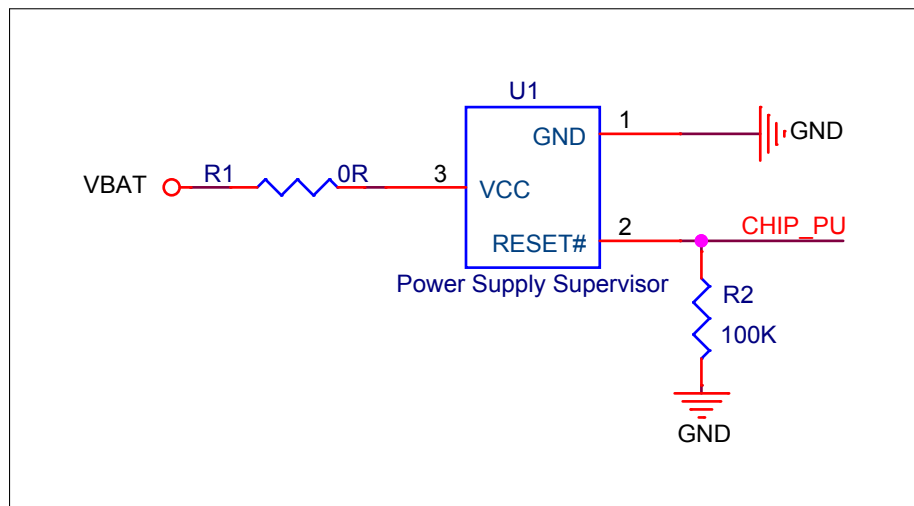


Figure 5: Discharge Circuit for VDD33 Rail

Note:

The discharge circuit can be applied in scenarios where ESP32 is powered on and off repeatedly by switching the power rails, and there is a large capacitor on the VDD33 rail. For details, please refer to Section **Power Scheme** in [ESP32 Datasheet](#).

**Figure 6: Reset Circuit****Note:**

When battery is used as the power supply for ESP32 series of chips and modules, a supply voltage supervisor is recommended to avoid boot failure due to low voltage. Users are recommended to pull CHIP_PU low if the power supply for ESP32 is below 2.3V.

8. Physical Dimensions

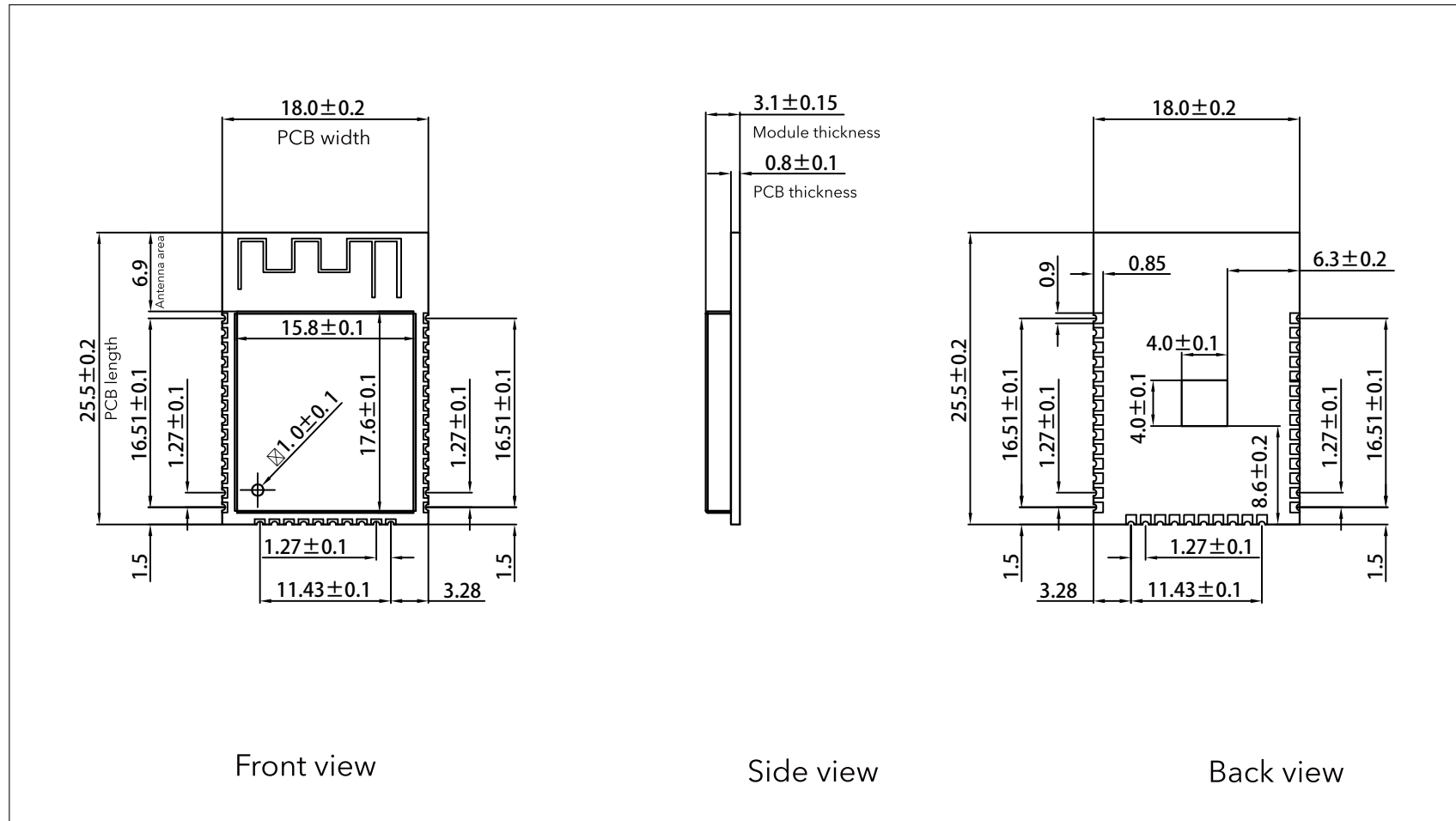


Figure 7: Physical Dimensions of ESP32-WROOM-32

Note:

All dimensions are in millimeters.

