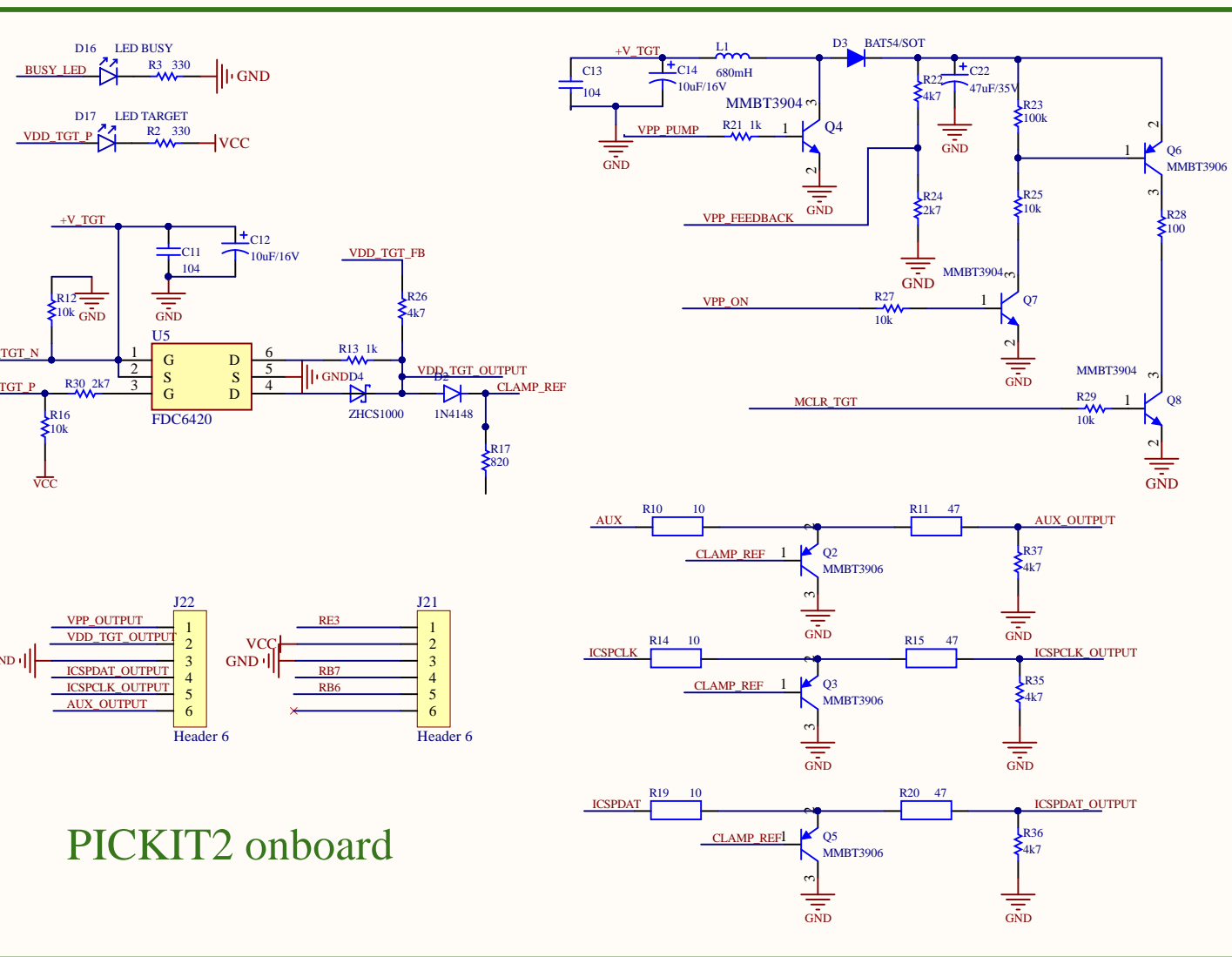
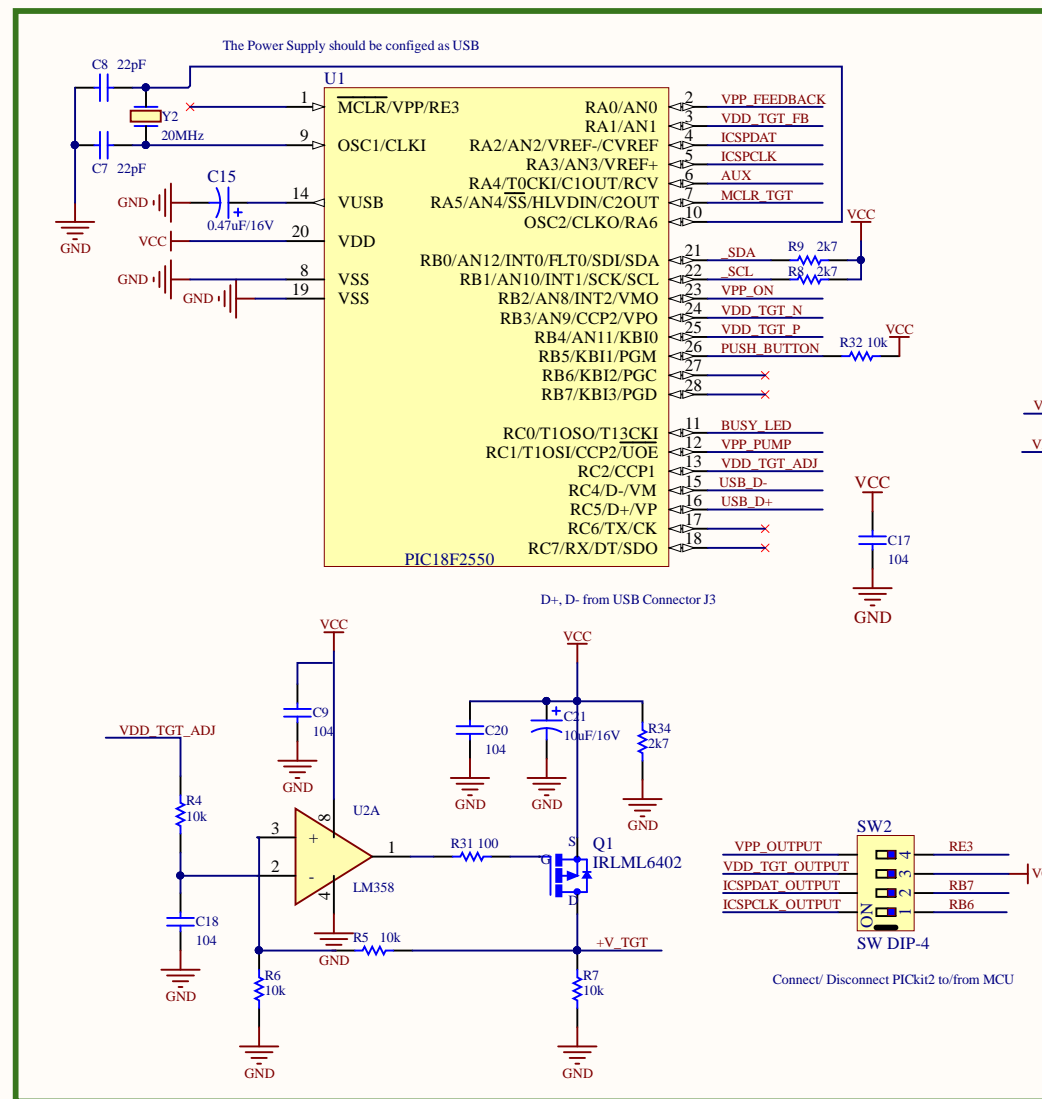
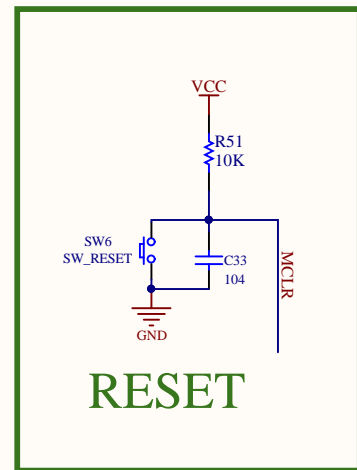


# POWER SUPPLY

The diagram illustrates a power supply circuit for an LED. It features an AC/DC converter (W08M/2A) connected to a USB B connector (J3) and a USB A connector (J1). The AC/DC converter's output (Vout) is connected to a 7805 voltage regulator (REG1) through a 470nF/25V capacitor (C1). The 7805 regulator's output (Vout) is connected to a 5V power supply (SW5 SW POWER) through a 470nF/25V capacitor (C3). The 5V power supply is connected to a 330 ohm resistor (R1) and an LED (D15) in series with VCC and GND. The LED is connected to GND. The 5V power supply is also connected to a 470nF/25V capacitor (C2) connected to GND.

[illegible]

# AL TIMER CLOCK

The diagram illustrates the wiring for an AL Timer Clock. It features a DS1307 real-time clock chip (U6) and a Motor Servo. The DS1307 is connected to a 32.768KHz crystal (Y3) and a battery (BT1). The chip's VCC is connected to VCC, and its GND is connected to GND. The SCL and SDA pins are connected to the RTC\_SCL and RTC\_SDA pins of the RTC module. The Motor Servo is connected to a 5V regulator. The servo's VCC is connected to VCC, and its GND is connected to GND. The servo's signal pin is connected to a 1N4007 diode (D14) and a 10K resistor (R54). The diode's cathode is connected to the servo's signal pin, and its anode is connected to the servo's VCC. The resistor is connected between the servo's VCC and GND. The servo's signal pin is also connected to a 1K resistor (R47) and a 10K resistor (R43). The 1K resistor is connected between the servo's signal pin and GND, and the 10K resistor is connected between the servo's signal pin and VCC.

## KEY MATRIX (PORTC)

The diagrams show the following connections:

- RC0 to J17:** Resistor R55 (1k) connects VCC to pin 1. Pin 3 is connected to a common ground symbol.
- RC1 to J18:** Resistor R56 (1k) connects VCC to pin 1. Pin 3 is connected to a common ground symbol.
- RC2 to J19:** Resistor R57 (1k) connects VCC to pin 1. Pin 3 is connected to a common ground symbol.
- RC3 to J20:** Resistor R58 (1k) connects VCC to pin 1. Pin 3 is connected to a common ground symbol.