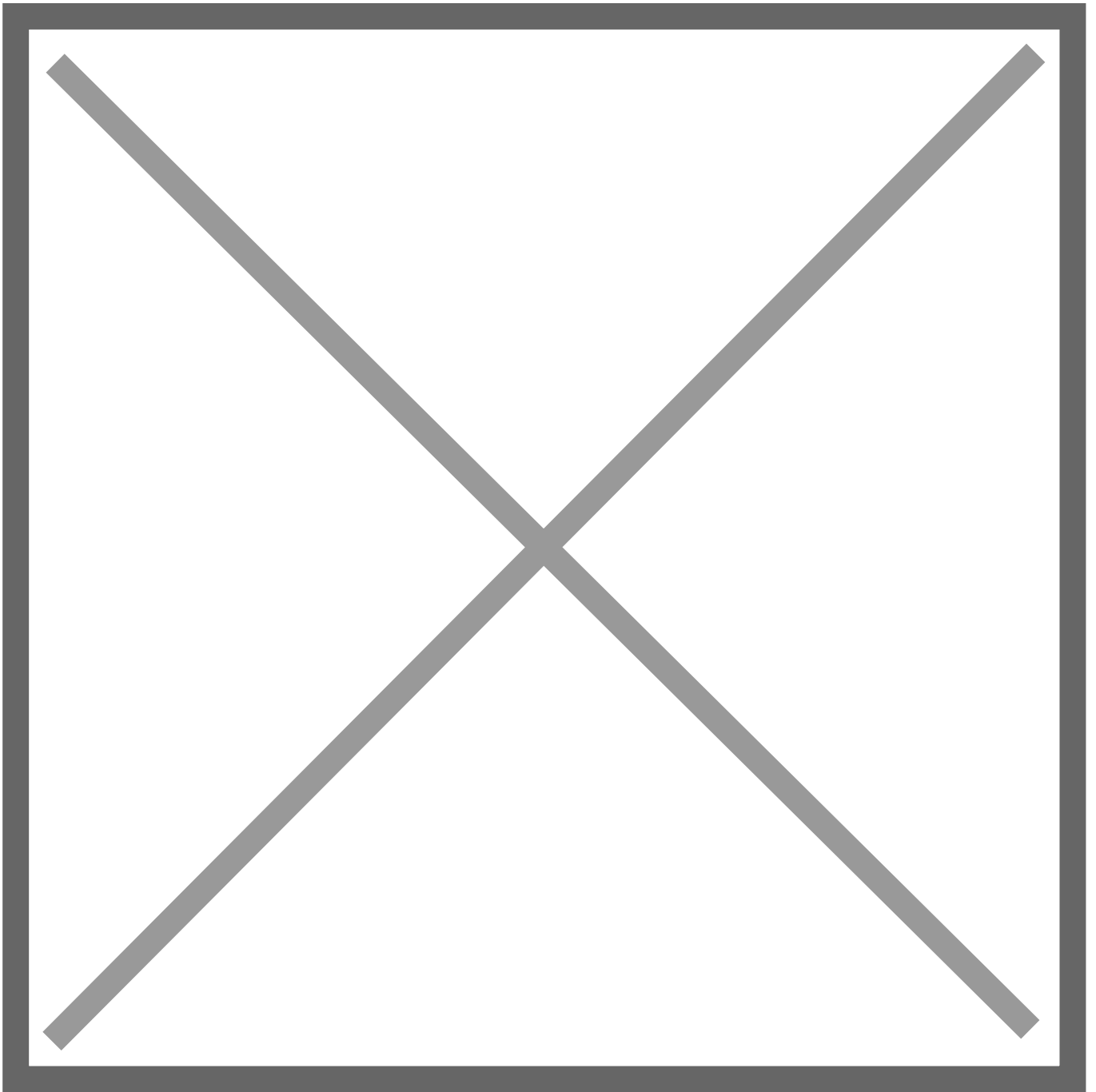


# Project Simulation

Before programming the FPGA, simulate the circuit behavior:

1. Go to the “**Simulate**” tab.
2. Click “**Advanced Simulation**”.
3. In advanced mode, go to **Menu > Run Iverilog**.
4. **Check for messages:**
  - No errors → you're ready for synthesis.
  - Errors → review the block connections and run the simulation again.



During simulation, observe the following signals:

Signal	Description
counter[7:0]	Should increment with each 20 Hz clock pulse.
pwm	PWM signal with increasing duty cycle.
led0	Inverted PWM signal applied to the LED.

