

# Connecting the Blocks

Below are the connection details between blocks for the project:

## ***clock\_20\_hz***

- Input:
  - clock: Connected to the system clock input pin clk.
- Output:
  - out: Connected to the input of the pulse\_count\_8\_bits block.

## ***pulse\_count\_8\_bits***

- Input:
  - pulse: Connected to the output of clock\_20\_hz.
- Output:
  - counter[7:0]: Connected to the duty\_cycle input of the pwm\_control8 block.

## ***pwm\_control8***

- Inputs:
  - clock: Connected directly to the system clk pin.
  - duty\_cycle[7:0]: Comes from the output of pulse\_count\_8\_bits.
- Output:
  - pwm: Connected to the A input of the inverterC block.

## ***inverterC***

- Input:
  - A: Receives the PWM signal from pwm\_control8.
- Output:
  - Q: Connected to the output pin I1, which can control an LED.

At the end, your project should be something like this:



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