Connecting the Blocks

Assemble the project with the following configuration:
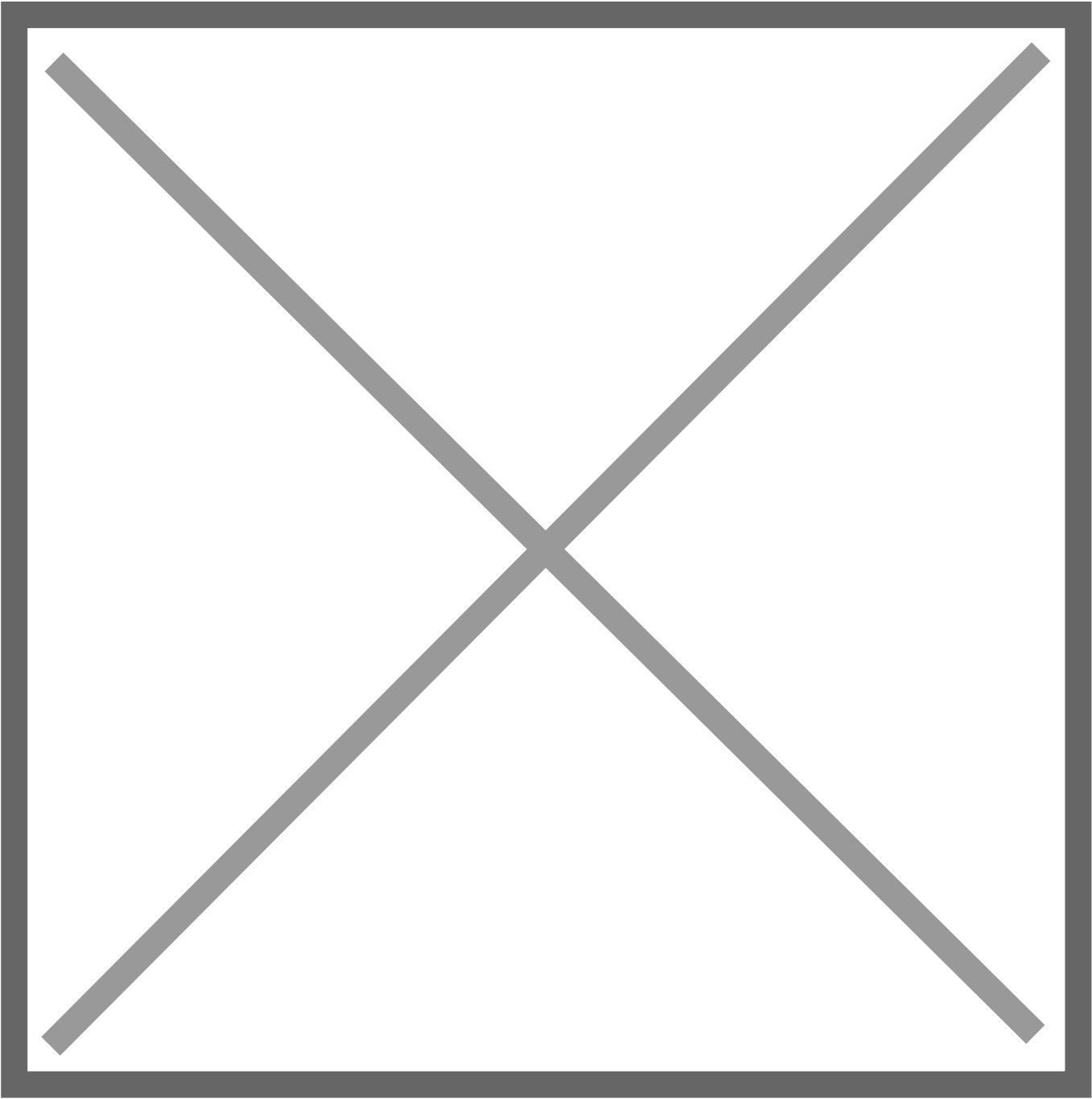
uart_rx Block

- **Inputs:**
  - clk → system clock
  - uartRx → UART input pin
- **Outputs**:
  - rxByte → connects to the logic block
  - byteReady → connects to both the logic block and uart_tx

uart_logic_const Block

- **Inputs**:
  - clk → system clock
  - rxByte → from rxByte output of uart_rx
  - byteReady → from byteReady output of uart_rx
  - compareChar → constant value (e.g., 8'h61 = 'a')
- **Output**:
  - signal → connects to LED (led0)

uart_tx Block

- **Inputs:**
  - clk → clock
  - reset → button (b0)
  - tx_data → receives rxByte from uart_rx
  - tx_data_valid → receives byteReady from uart_rx
- **Output**:
  - tx_pin → connects to the UART TX output pin
  - tx_data_ready → not used in this simple project

Final Connections:

Block/Pin	Connection
clk	All blocks
uart_rx	UART RX input
uart_tx	UART TX output
b0	Reset signal for uart_tx
led0	Output from signal of uart_logic_const