

Lab 01

Usage of FPGA Experiment Board



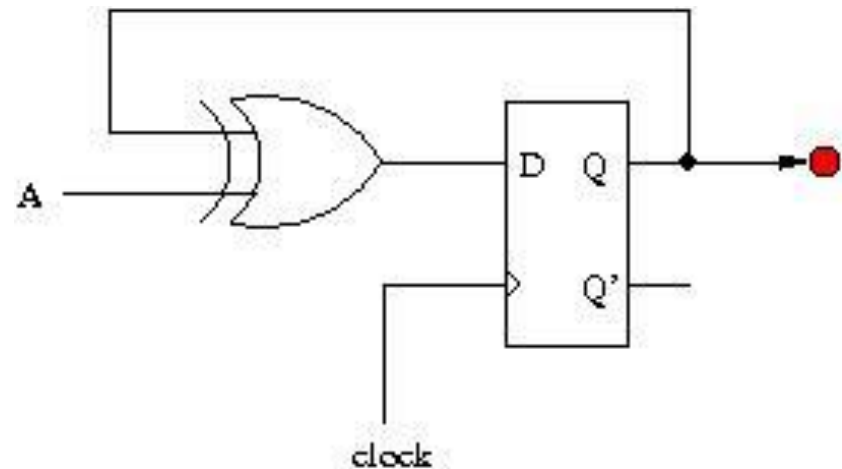
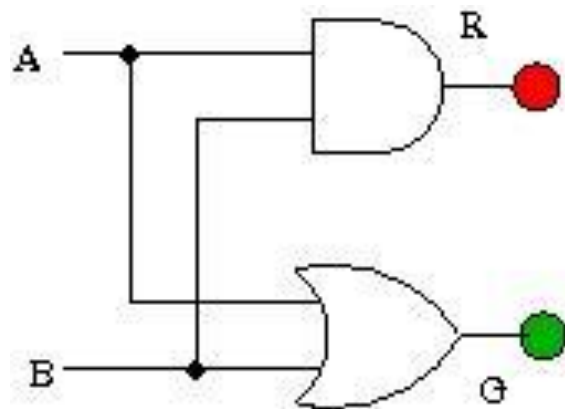


Today's Goals

- (1) Let you know how to work with our FPGA board
 - FPGA: Field Programmable Gate Array
 - a special hardware architecture to simulate digital circuit design
- (2) Establish your imagination on timing analysis

Task 1

- Draw the two circuits and demo how it works on FPGA
 - Connects buttons, LEDs, and clock signal with FPGA pins
- Answer the question in your report:
 - Explain why the sequential circuit seems not reliable



Task 2

- Draw the circuit and demo the timing waveform of the simulation to TA
- Answer the question in your report:
 - What is the maximum clock frequency that the circuit can work correctly?

