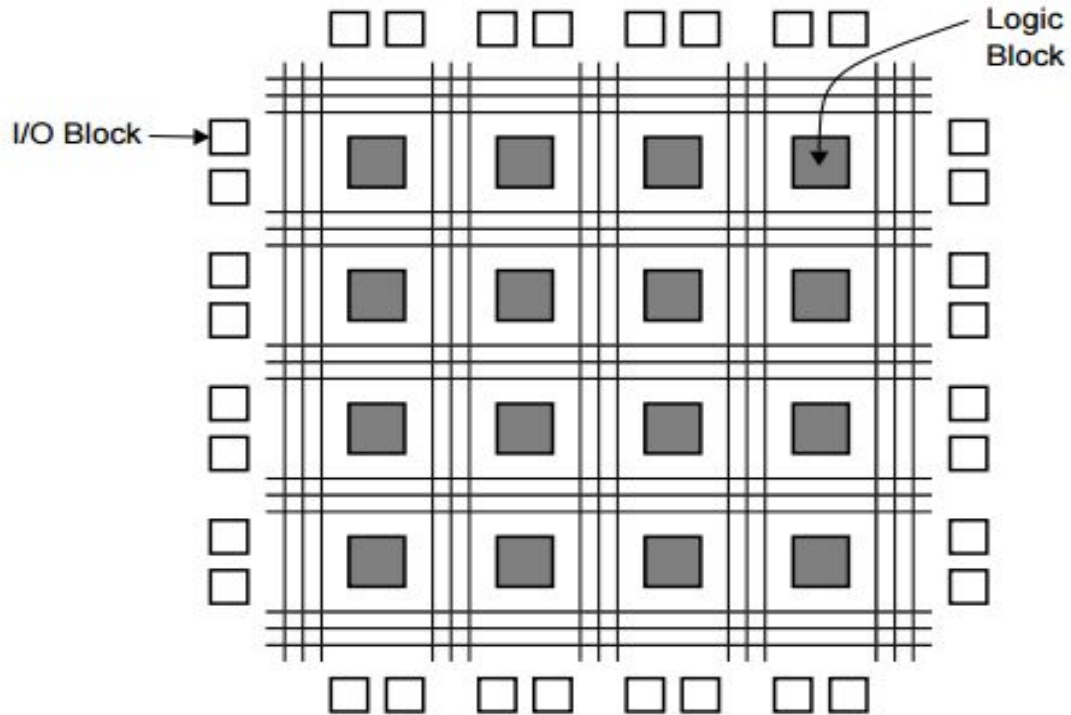# Introduction to FPGA

What is an FPGA?

Structure of an FPGA

Example

Implement a 4-input AOI gate on FPGA.

Making an UCF(user constraint file)

Syntax: Net "a1" LOC ="P11"

- Synthesize
- Implement Design
- Generate bit file
- Download to FPGA

Problem Set 1

Blink an LED.

Input	Output
00	Reset
01	0.5Hz
10	1Hz
11	2Hz

Problem Set 2

Implement a counter from 0 to 9 on 7-Segment LED.

Problem Set 3

Implement a counter from 00 to 60 on 7-Segment LEDs.