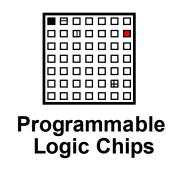
## Who is Xilinx?

Provides programmable logic solutions



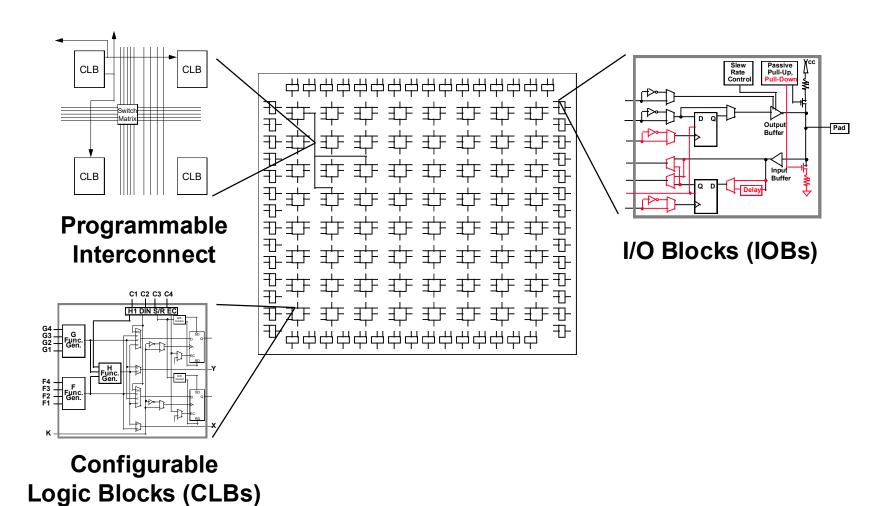


- Inventor of the Field Programmable Gate Array
- \$900M Annual Revenues; 36+% annual growth

## Xilinx FPGA Family

- Virtex Family
  - SRAM Based
  - Largest device has 1M gates
  - Configurable Logic Blocks (CLBs) have two 4-input LUTS, 2 DFFs
  - Four onboard Delay Locked Loops (DLLs) for clock synchronization
  - Dedicated RAM blocks (LUTs can also function as RAM).
  - Fast Carry Logic
- XC4000 Family
  - Previous version of Virtex
  - No DLLs, No dedicated RAM blocks

## XC4000 Architecture



## XC4000E/X Configurable Logic Blocks

- 2 Four-input function generators (Look Up Tables)
  - 16x1 RAM or Logic function
- 2 Registers
  - Each can be configured as Flip Flop or Latch
  - Independent clock polarity
  - Synchronous and asynchronous
    Set/Reset

