

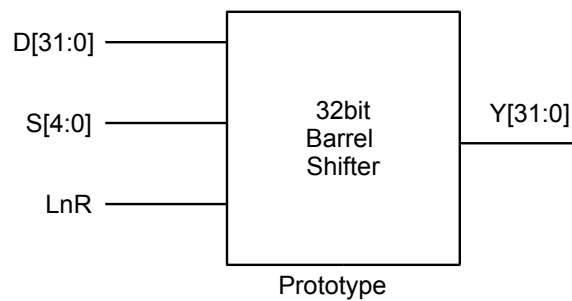
## CS147 - Lab 13

# Gate Level Modeling

Kaushik Patra  
([kaushik.patra@sjsu.edu](mailto:kaushik.patra@sjsu.edu))

1

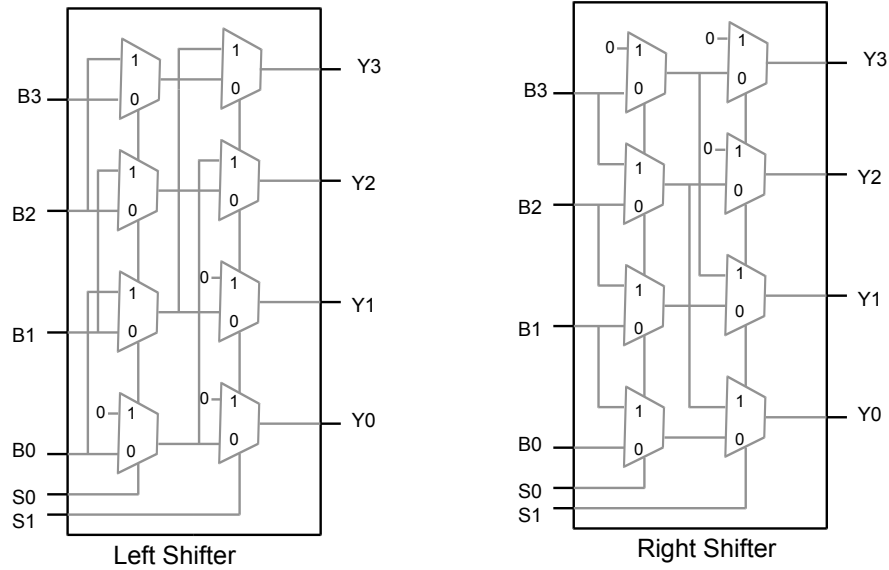
## Implement 32-bit Barrel Shifter



File: barrel\_shifter.v

2

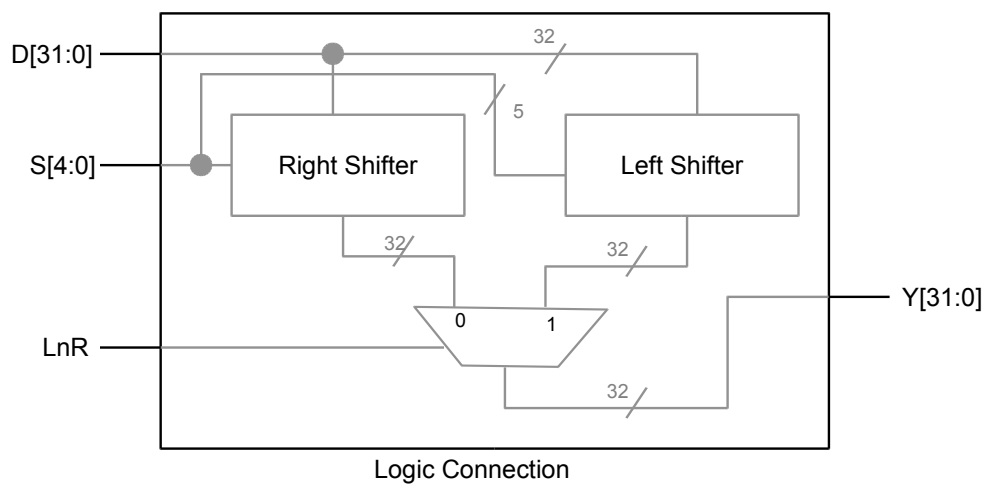
## Extend 4-bit Barrel Shifter to 32-bit



File: barrel\_shifter.v

3

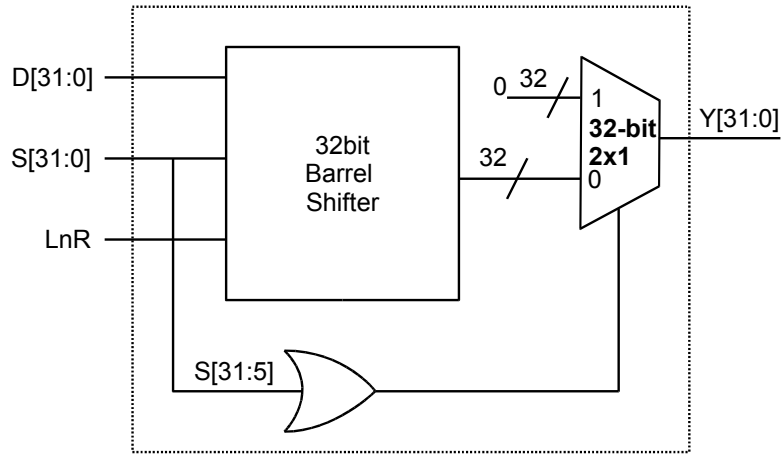
## Implement 32-bit Barrel Shifter



File: barrel\_shifter.v

4

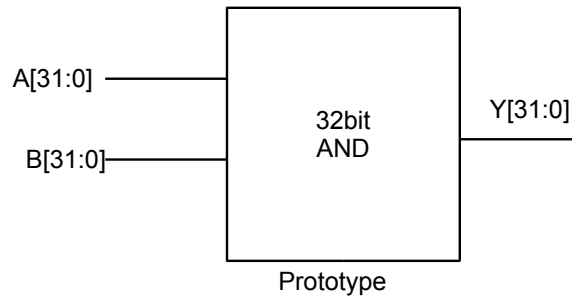
## Implement 32-bit Barrel Shifter



File: barrel\_shifter.v

5

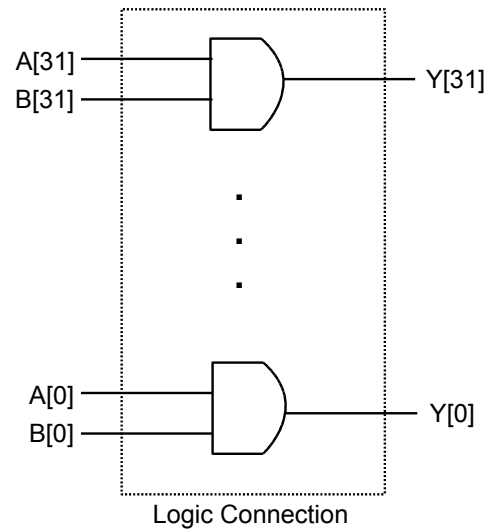
## Implement 32-bit AND



File: logic\_32\_bit.v

6

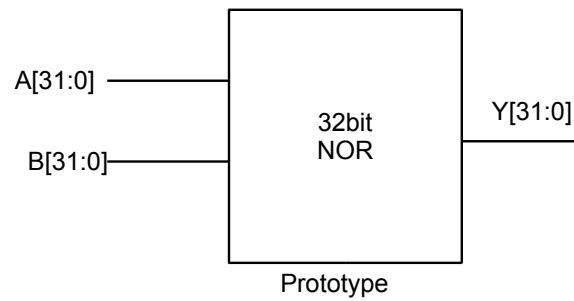
## Implement 32-bit AND



File: logic\_32\_bit.v

7

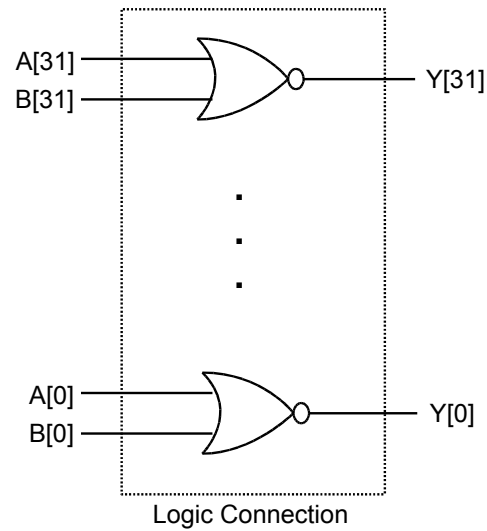
## Implement 32-bit NOR



File: logic\_32\_bit.v

8

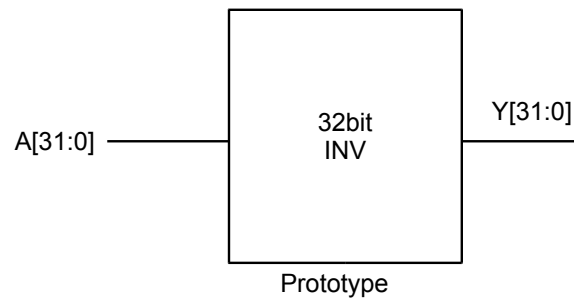
## Implement 32-bit NOR



File: logic\_32\_bit.v

9

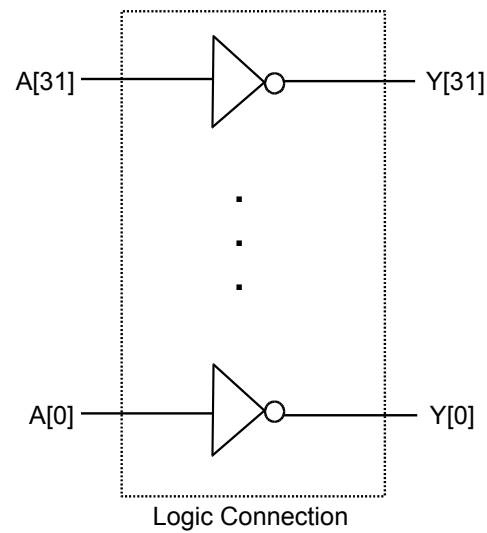
## Implement 32-bit INV



File: logic\_32\_bit.v

10

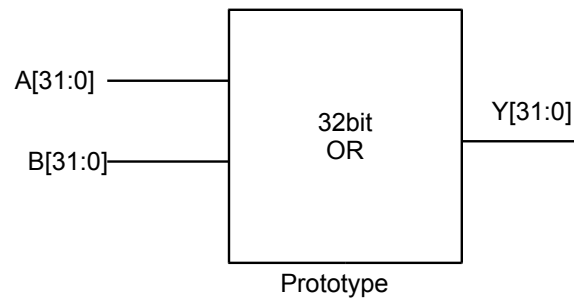
## Implement 32-bit INV



File: logic\_32\_bit.v

11

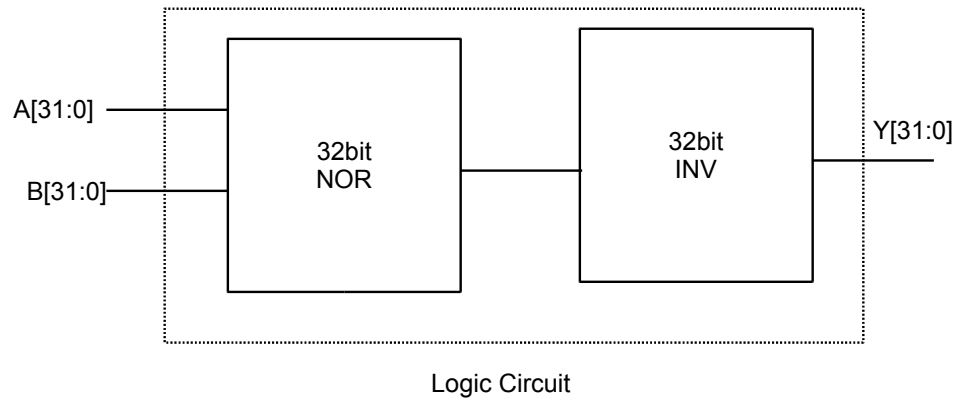
## Implement 32-bit OR



File: logic\_32\_bit.v

12

## Implement 32-bit OR



File: logic\_32\_bit.v

13

## CS147 - Lab 13

# Gate Level Modeling

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