

FPGA Speaks

Level-1
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1 Introduction

In level 1, information about basic logic gates like or, nor, and, nand, xor, xnor, and not gates is included.

2 Tools/Requirements

Xilinx Vivado

3 Basic Logic Gates

OR Gate: The output of the or gate is high when one of the inputs is high.

NOT Gate: The output of not gate is a complement of the input.

AND Gate: The output of the and gate is high when all the inputs are high.

XOR Gate: The output of the xor gate is high when the number of high inputs is odd.

NAND Gate: The output of nand gate is high when one of the inputs is low.

NOR Gate: The output of the nor gate is high when all the inputs are low.

XNOR Gate: The output of xnor gate is high when the number of high inputs is even.

4 What have I done at this level?

Coding of basic logic gates is done using Xilinx Vivado.

5 Links

[Link to my github](#)