Multiplexers

# Multiplexers Wilfrid Laurier University

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Multiplexers

Introduction

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 A multiplexer has several input lines, select inputs, and one or more outputs.

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#### Introduction

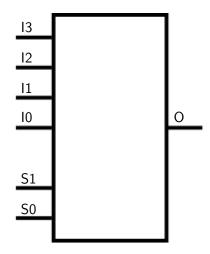
## Introduction

 A multiplexer has several input lines, select inputs, and one or more outputs.

The outputs follow whichever input is identified by the select inputs.

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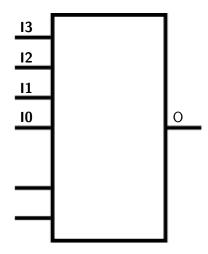


This is a 4 input multiplexer.

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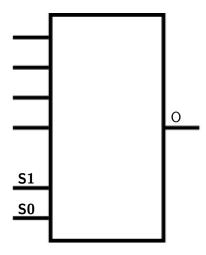
These are the inputs.

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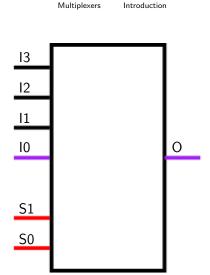




These are the *select* inputs.

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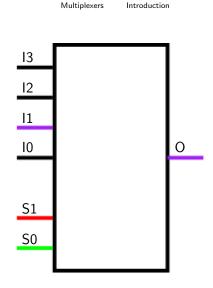


When input 0 is selected, the output follows input I0.

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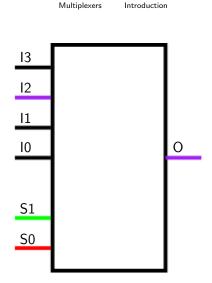


When input 1 is selected, the output follows input I1.

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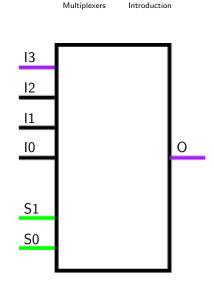


When input 2 is selected, the output follows input I2.

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When input 3 is selected, the output follows input I3.

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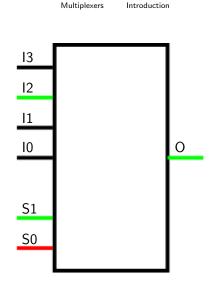
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Multiplexers Introduction

Here's a closer look where a single input, I2, is selected.

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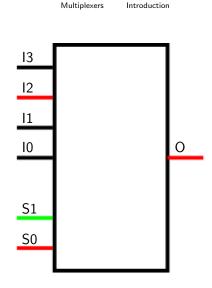


When input 2 is selected, and input 2 is HIGH the output is HIGH.

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When input 2 is selected, and input 2 is LOW the output is LOW.

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