Main Template

Ethan Anthony

Contents

1 Introduction

1.1 Categorization of Components

Rather than trying to understand full circuits at once, it is easier to break them into two groups: **passive** components and **active** components.

Passive Components **1.1**

Passive components are ones that don't require any power supply to operate. For example, a resistor or a capacitor are both passive components.

Active Circuits **1.2**

Active components require power to operate. In other words, they need to be connected to a power supply to function. Logic gates (74LSXX) are active since they require a power supply.

Another way to divide components is between **linear** and **non-linear**.

Linear Components **1.3**

Linear components are... They also can be subdivided into components that store energy (capacitors and inductors) and components that dissipate energy (resistors).

Non-Linear Components **1.4**

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