

Introduction to Electronics Manufacturing

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A brief introduction

- ▶ Introduction
- ▶ Component types
- ▶ Circuit Design Process
- ▶ Manufacturing Processes
- ▶ Considerations for Integration

- ▶ Chips (integrated circuits)
- ▶ Passives (Resistors, Capacitors, Inductors)
- ▶ Discretes (Transistors, Diodes, other)
- ▶ Sensors
- ▶ Connectors

- ▶ Analog vs Digital
- ▶ Design Steps
 - ▶ Brainstorming and sketching
 - ▶ Analysis
 - ▶ Simulation
 - ▶ Prototyping
 - ▶ Testing
 - ▶ Optimize and repeat!

- ▶ Schematic Capture
- ▶ Simulation (analog and digital)
- ▶ Physical Layout