

Practical case: Noise suppression with RF choke

Level: Medium - Demonstrate the high impedance of the inductor at high frequencies to block noise in power lines.

Objective and use case

You will...

Practical case: Resonance in LC tank circuit

Level: Medium | Analyze the energy exchange and determine the resonant frequency of an AC-driven LC tank.

Objective and use case

In this practical case,...

Practical case: Boost converter storage

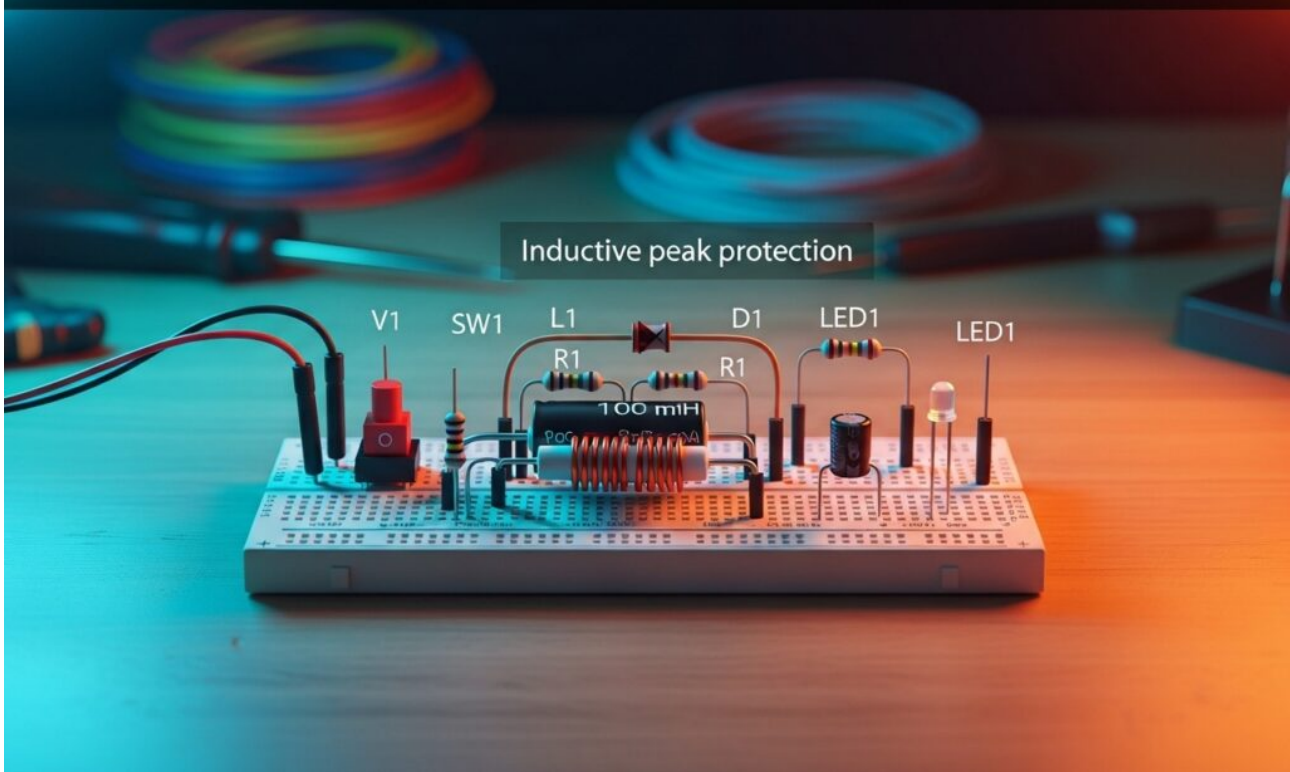
Level: Medium | Understand magnetic energy storage to boost voltage.

Objective and use case

In this practical case, you will build a basic open-loop Boost...

Practical case: Inductive peak protection

Inductive peak protection

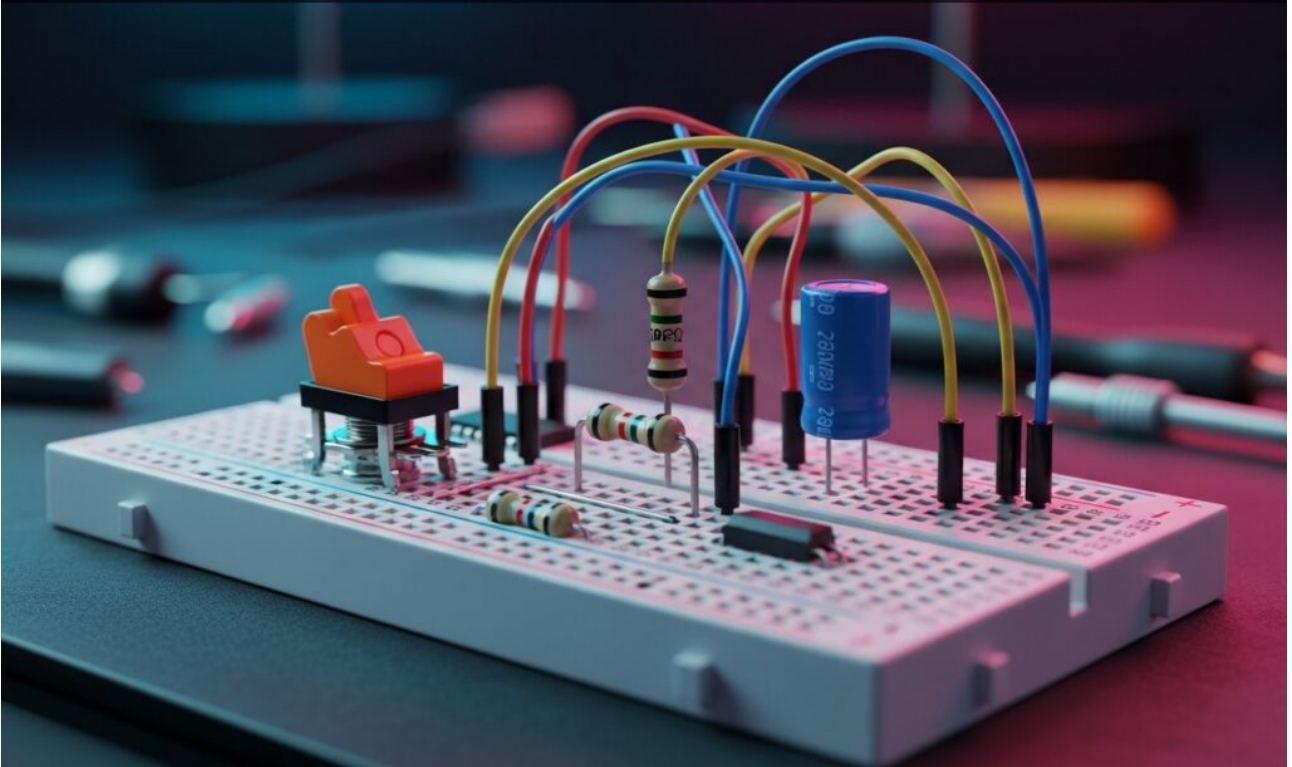


Level: Medium | Objective: Analyze the transient voltage generated when disconnecting an inductor and mitigate it using a flyback diode.

Objective and use...

Practical case: RC pushbutton debounce

RC pushbutton debounce



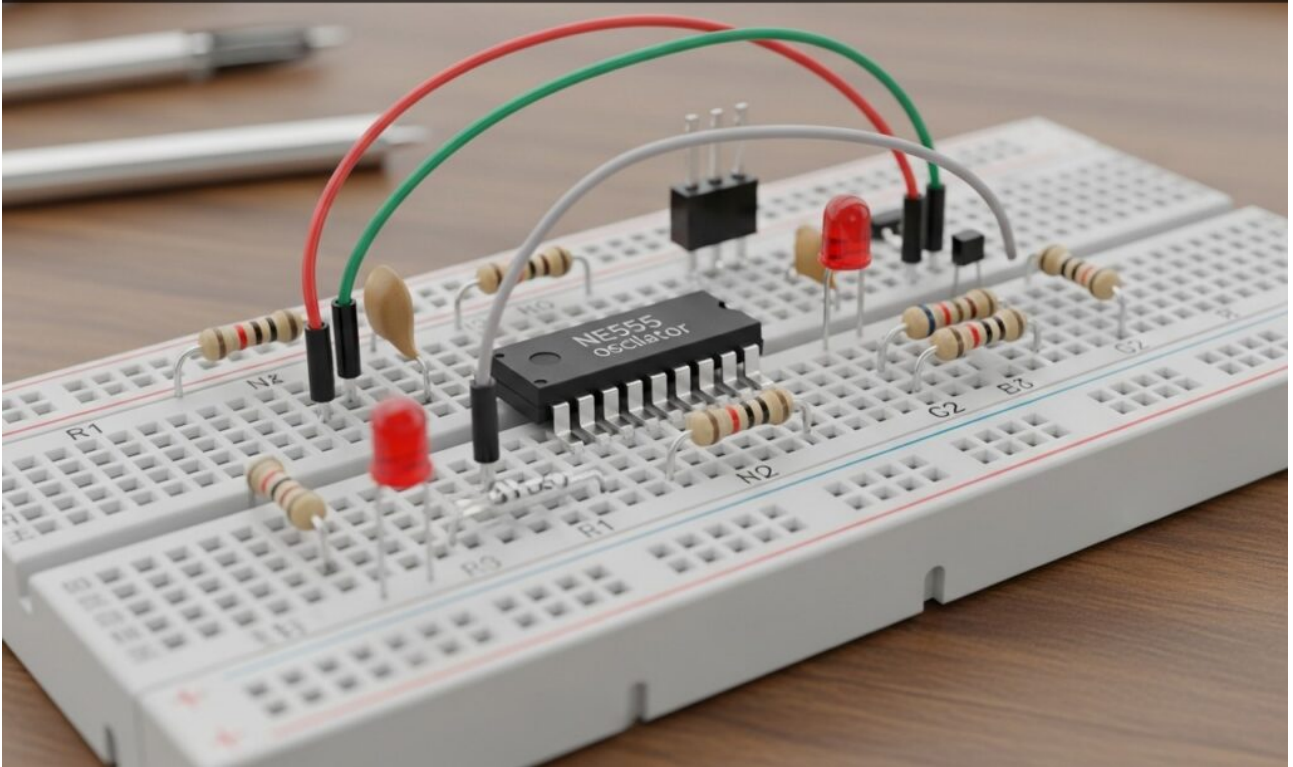
Level: Medium | Use a capacitor to mitigate mechanical noise when actuating a physical switch.

Objective and use case

In this practical case, you will...

Practical case: Astable oscillator with NE555

Astable oscillator with NE555



Level: Medium - Configure a capacitor in an NE555 circuit to control the oscillation frequency.

Objective and use case

In this practical case, you will...