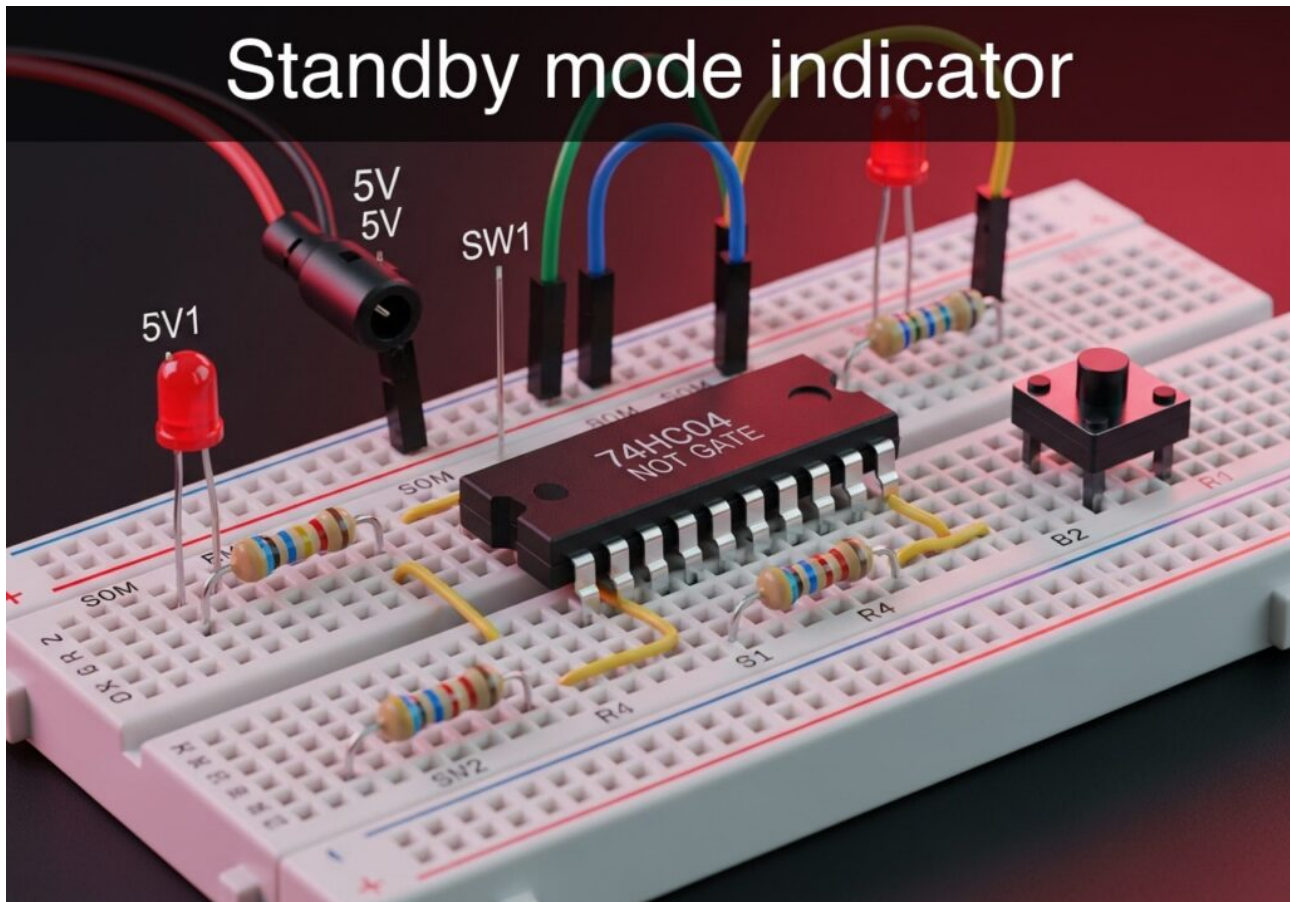


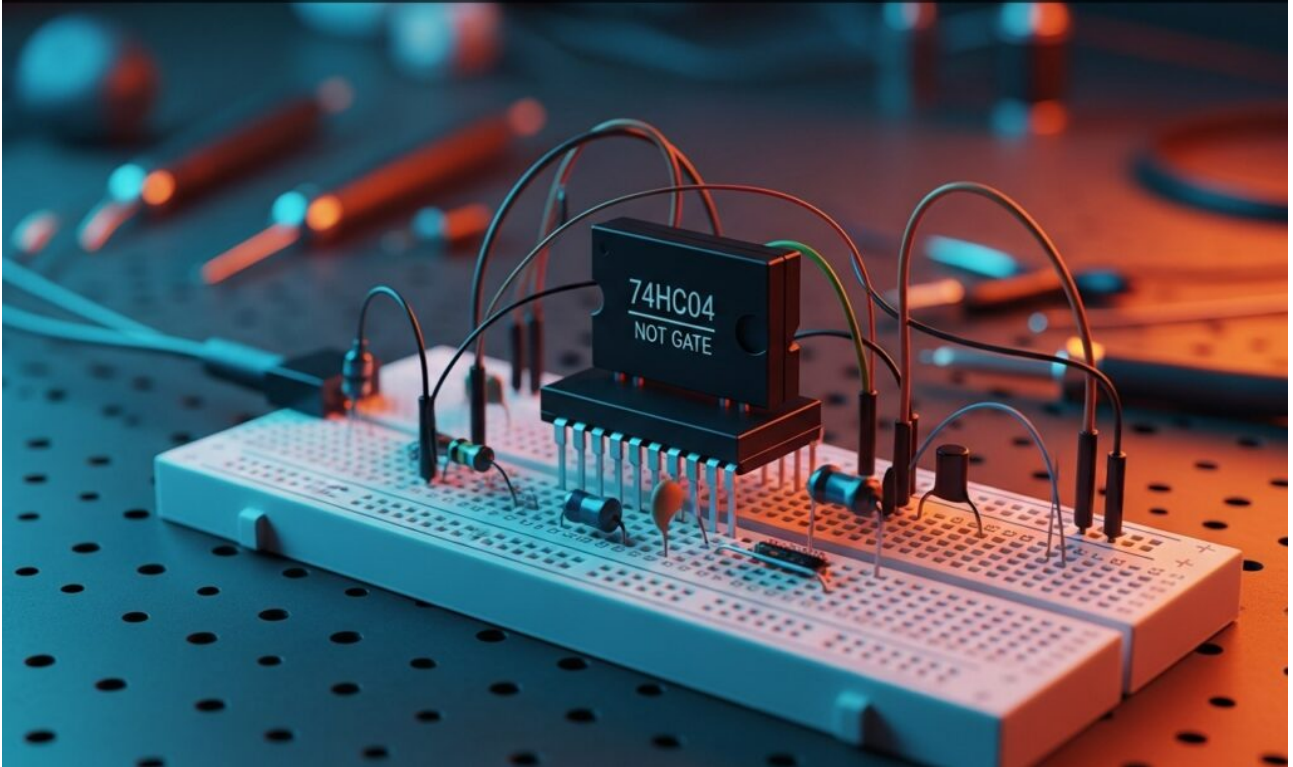
Practical case: Standby mode indicator



Level: Basic - Understand logical inversion using a NOT gate to activate a standby LED when the main system turns off.

Practical case: CMOS linear amplifier

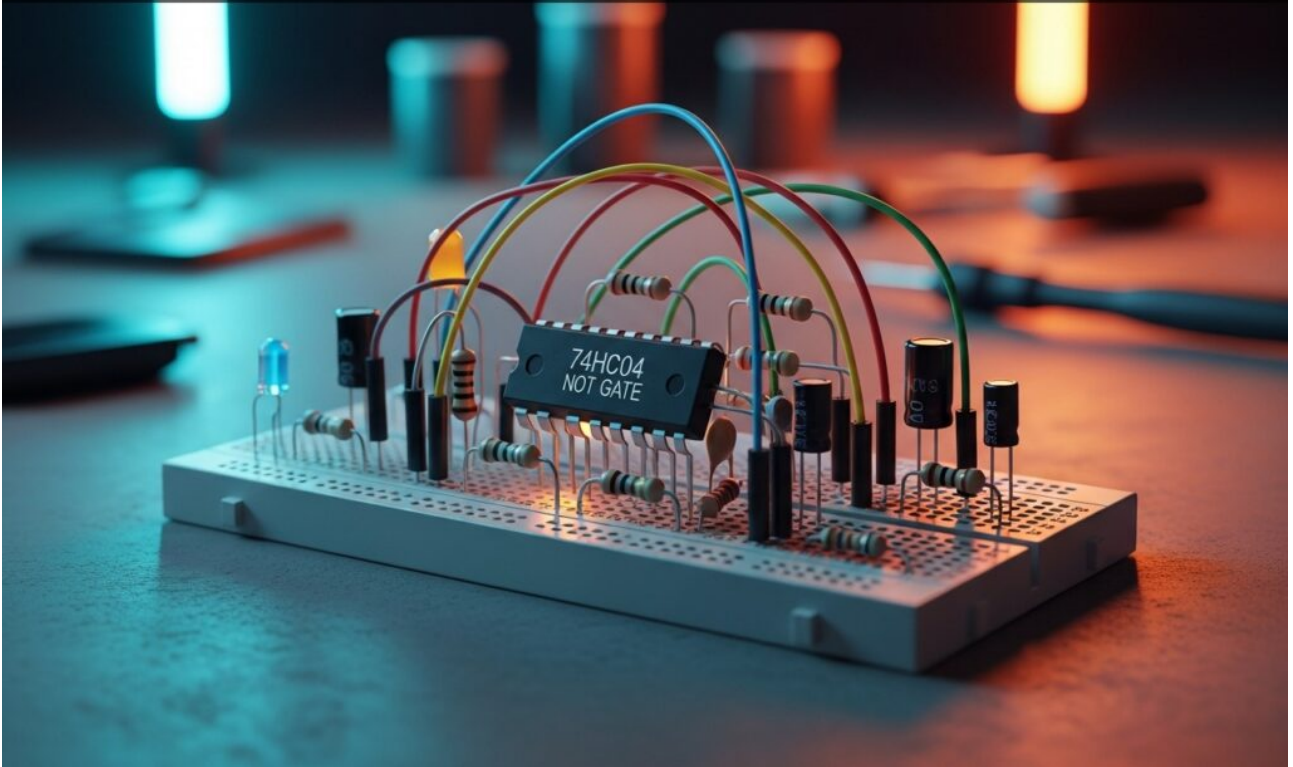
CMOS linear amplifier



Explore Digital Electronics by configuring a NOT gate as a Class A linear amplifier. Build the circuit to observe measurable AC signal gain and self-biasing.

Practical case: Ring Oscillator and Delay

Ring Oscillator and Delay



Master Digital Electronics by building a ring oscillator using NOT gates. Measure the MHz output frequency to calculate precise propagation delay.

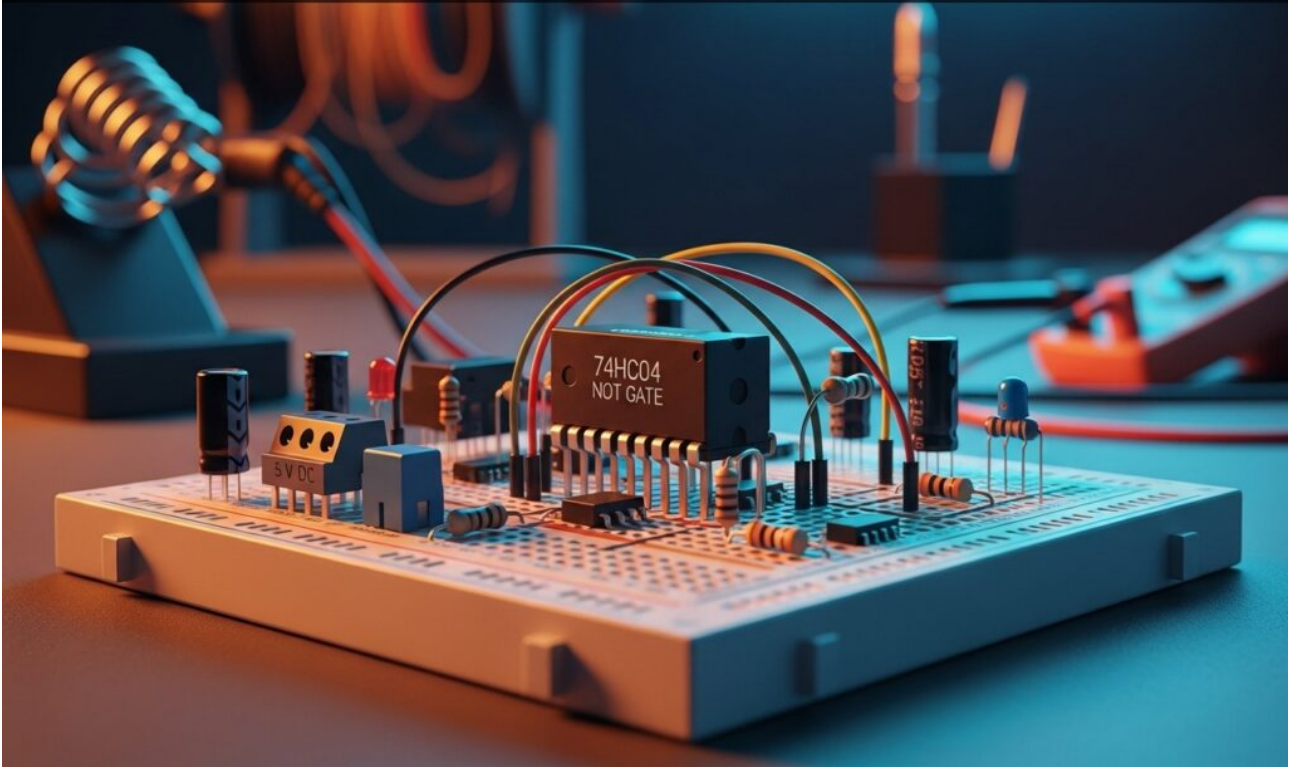
Practical case: Empty Tank Level Indicator

Empty Tank Level Indicator

Master Digital Electronics by building a water level alarm with a NOT gate. Design a circuit that lights an LED when tanks empty, preventing pump damage.

Practical case: Emergency deactivation

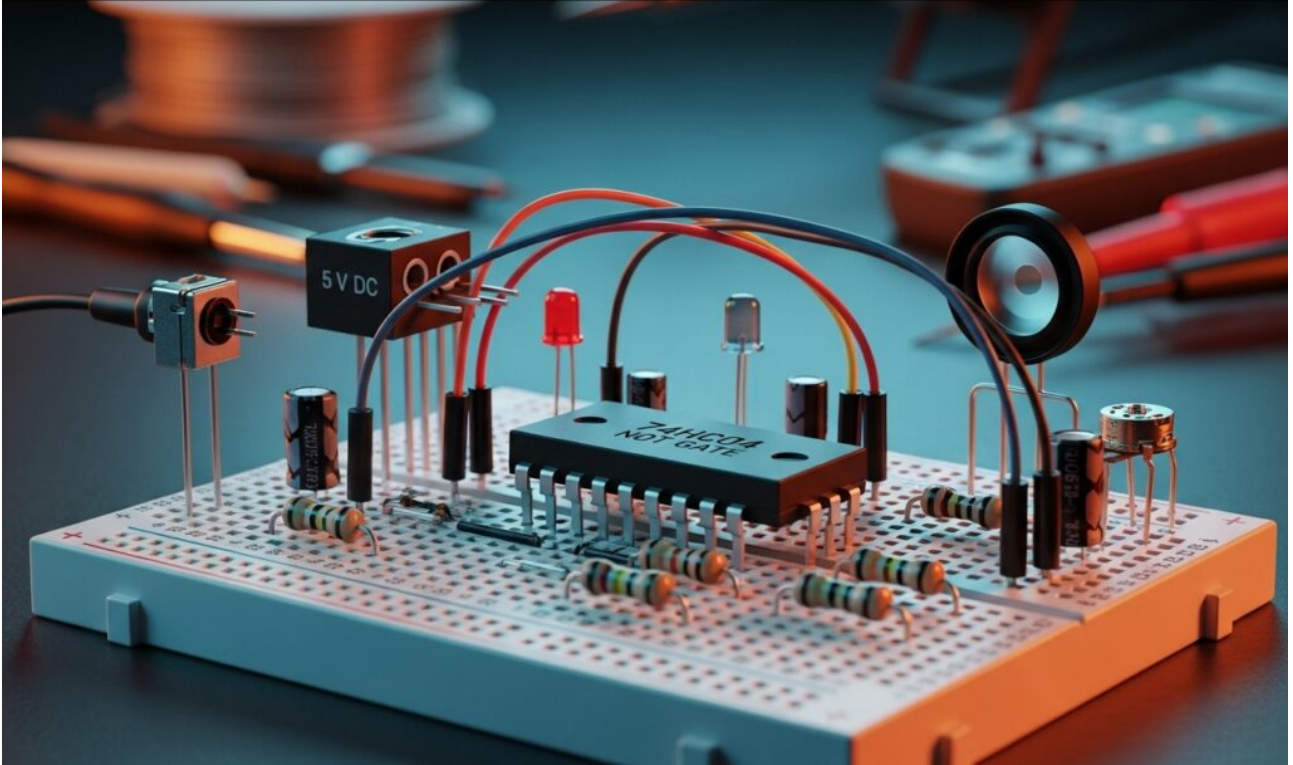
Emergency deactivation



Learn Digital Electronics by building a safety kill switch using a NOT gate. Create a circuit where pressing a button instantly cuts the Ready signal voltage.

Practical case: Automatic darkness sensor

Automatic darkness sensor



Master Digital Electronics by building an automatic night light. Use a NOT gate and LDR to detect darkness and trigger an LED, learning practical sensor logic.