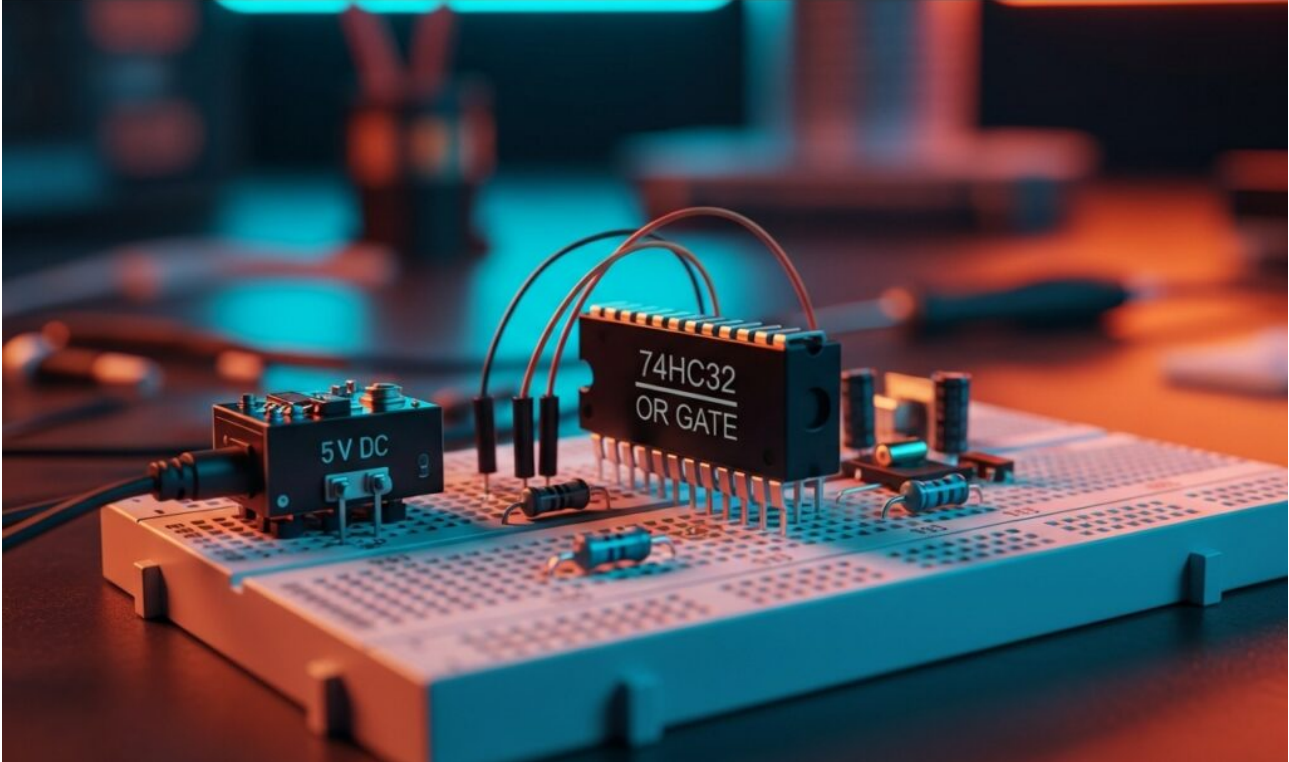


Practical case: Multi-perimeter intrusion detection

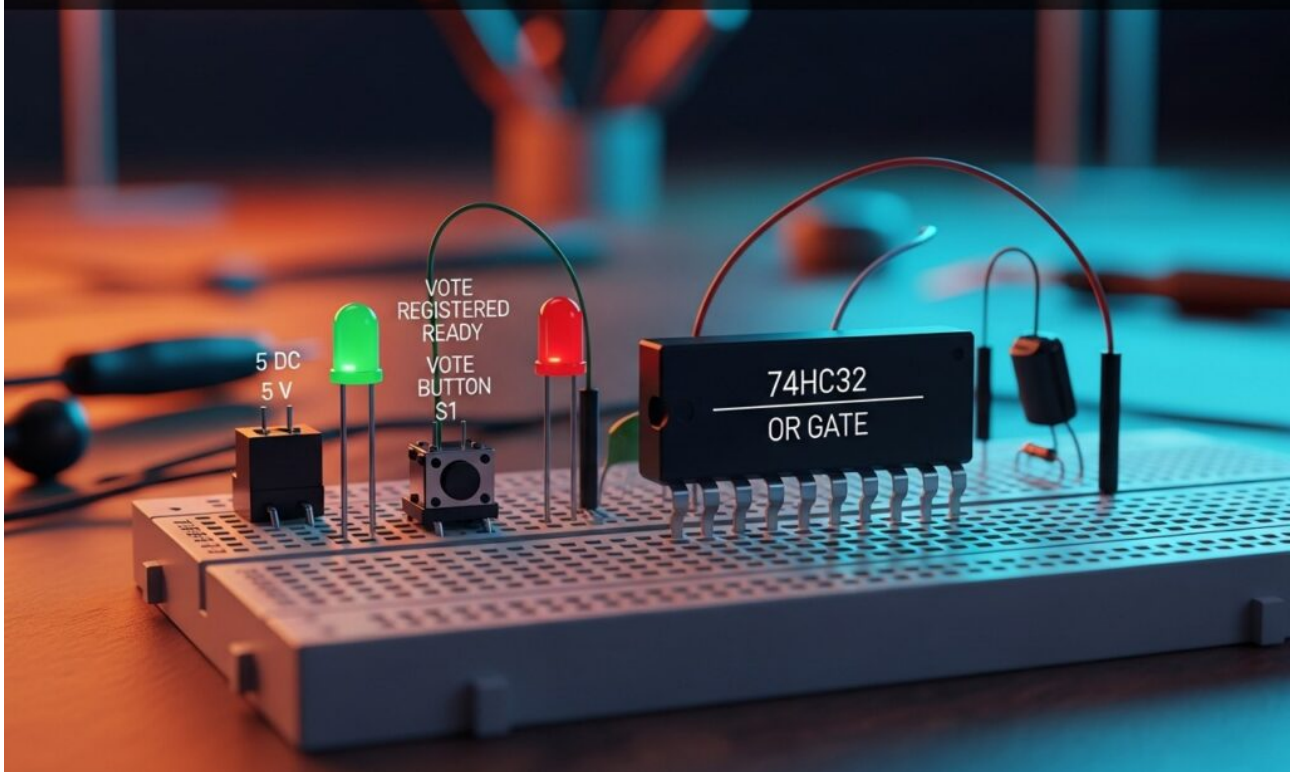
Multi-perimeter intrusion detection



Master Digital Electronics by building a 4-zone security alarm. Use an OR gate to trigger a relay and siren instantly when any single access point is breached.

Practical case: Simple electronic voting system

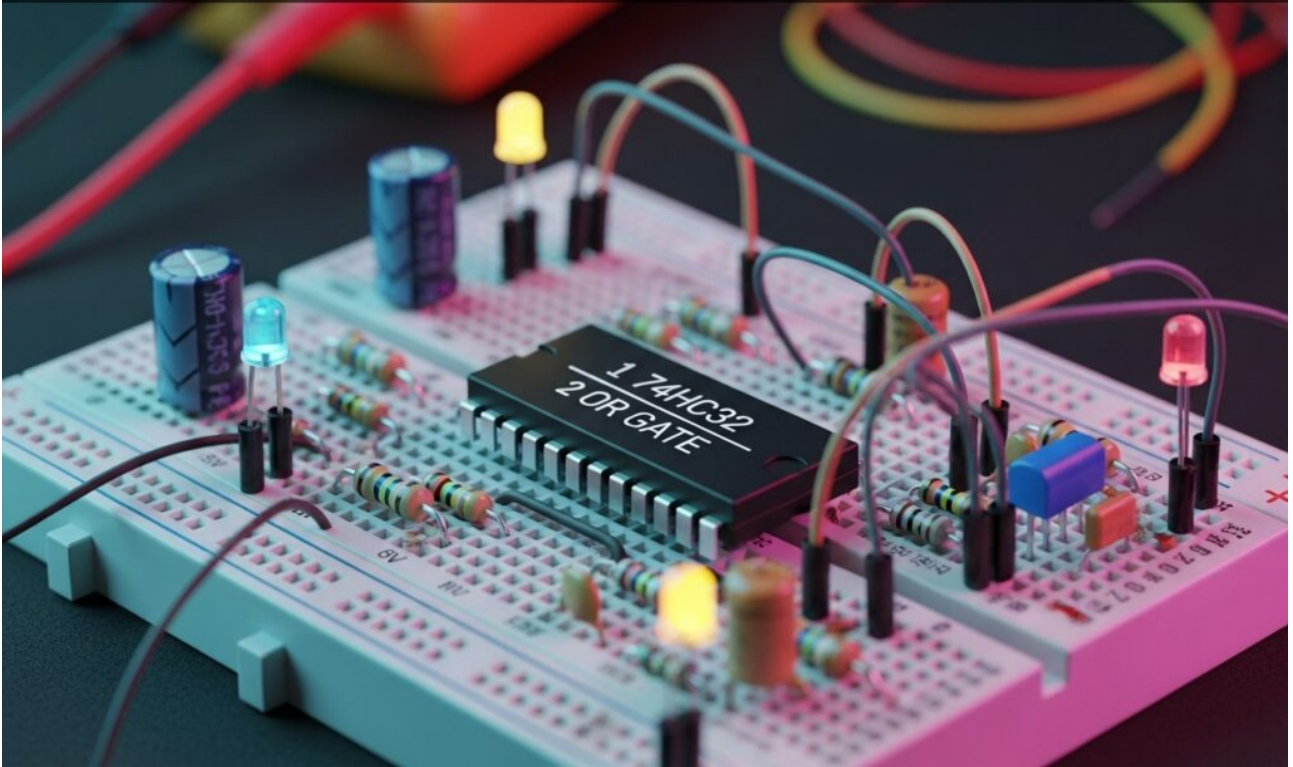
Simple electronic voting system



Master Digital Electronics by building a voting system with an OR gate. Design a circuit that triggers a visual signal when any judge activates a switch.

Practical case: Production Line Fault Monitoring

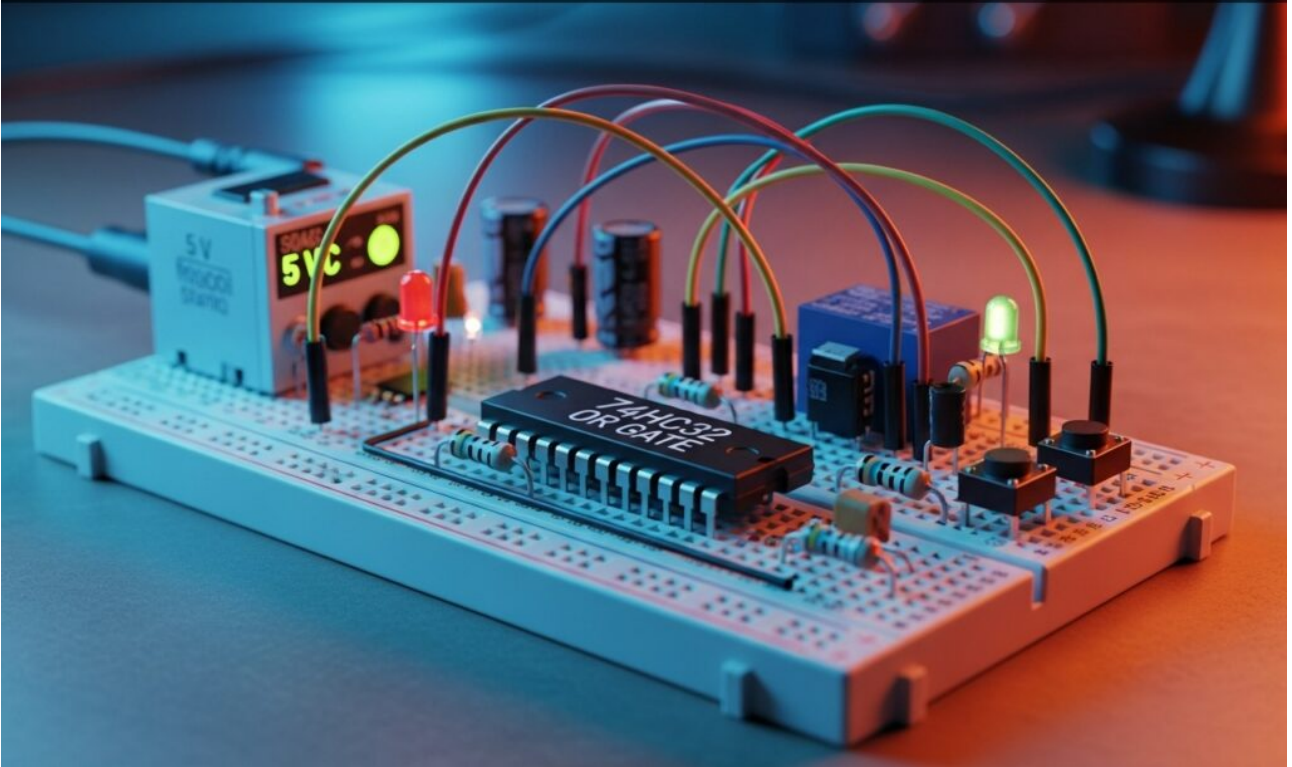
Production Line Fault Monitoring



Master Digital Electronics by building a safety circuit with an OR gate. Stop a conveyor belt instantly when temperature or jam sensors detect faults.

Practical case: Redundant motor starter system

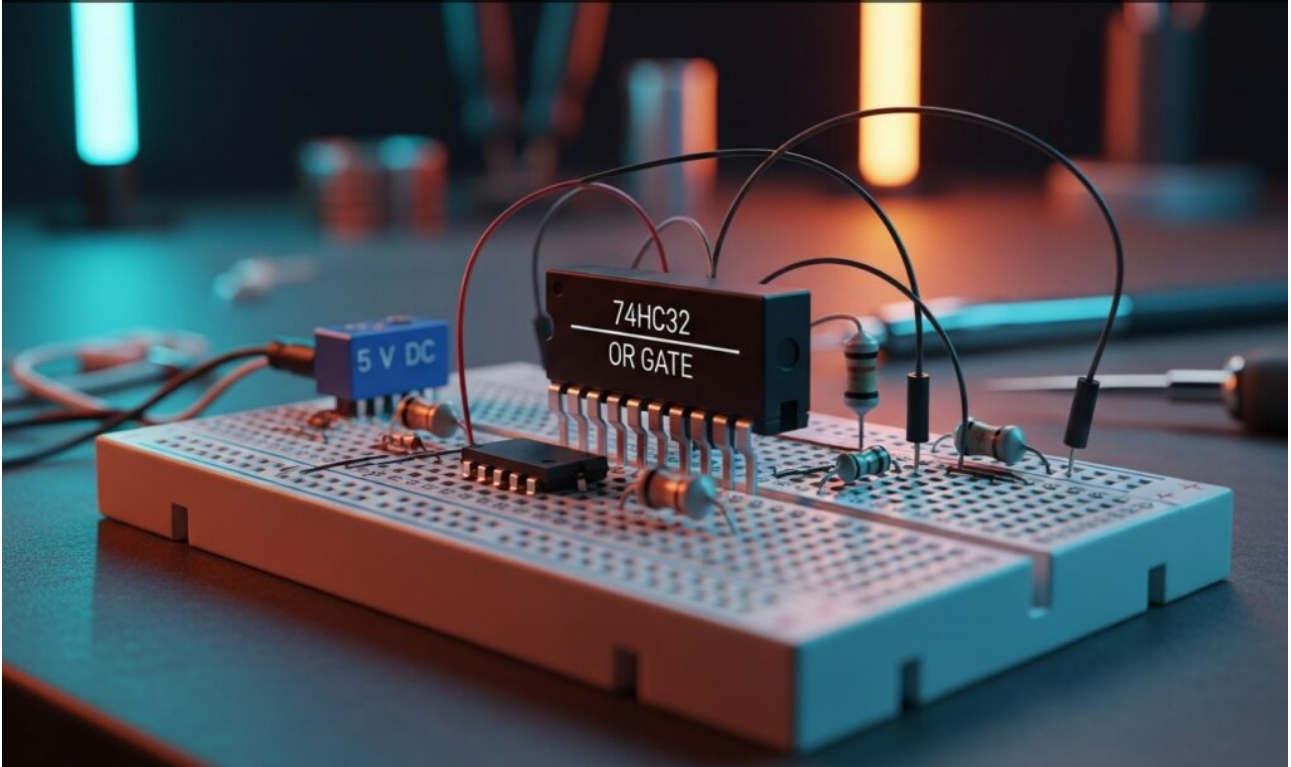
Redundant motor starter system



Master Digital Electronics by building a dual-start motor control circuit. Use an OR gate to trigger a relay and drive heavy loads from two distinct locations.

Practical case: Emergency water pump activation

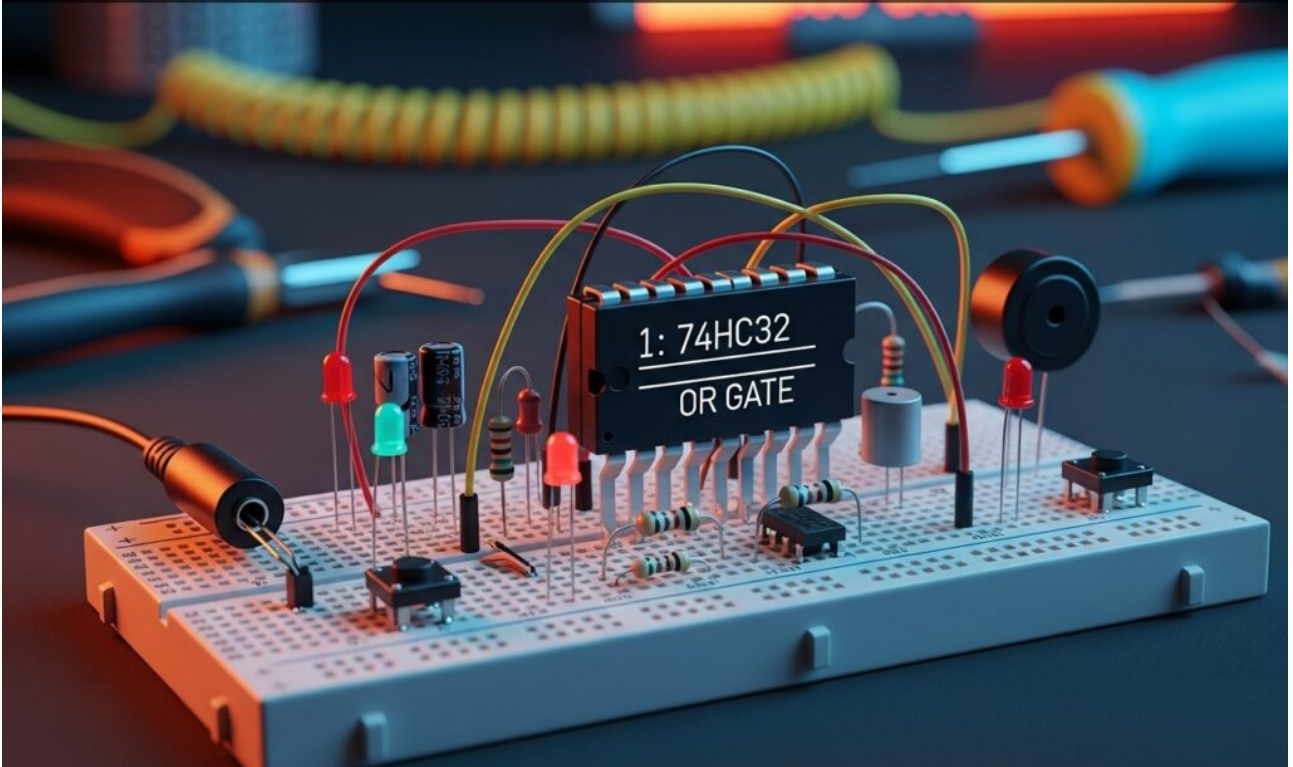
Emergency water pump activation



Master Digital Electronics by building a flood prevention system. Use an OR gate to activate a drainage pump when water sensors trigger a 5V logic signal.

Practical case: Car Door Open Warning System

Car Door Open Warning System



Master Digital Electronics by building a car door alarm with a 74HC32 OR gate. Learn to detect open circuits and trigger LED alerts for safer security systems.