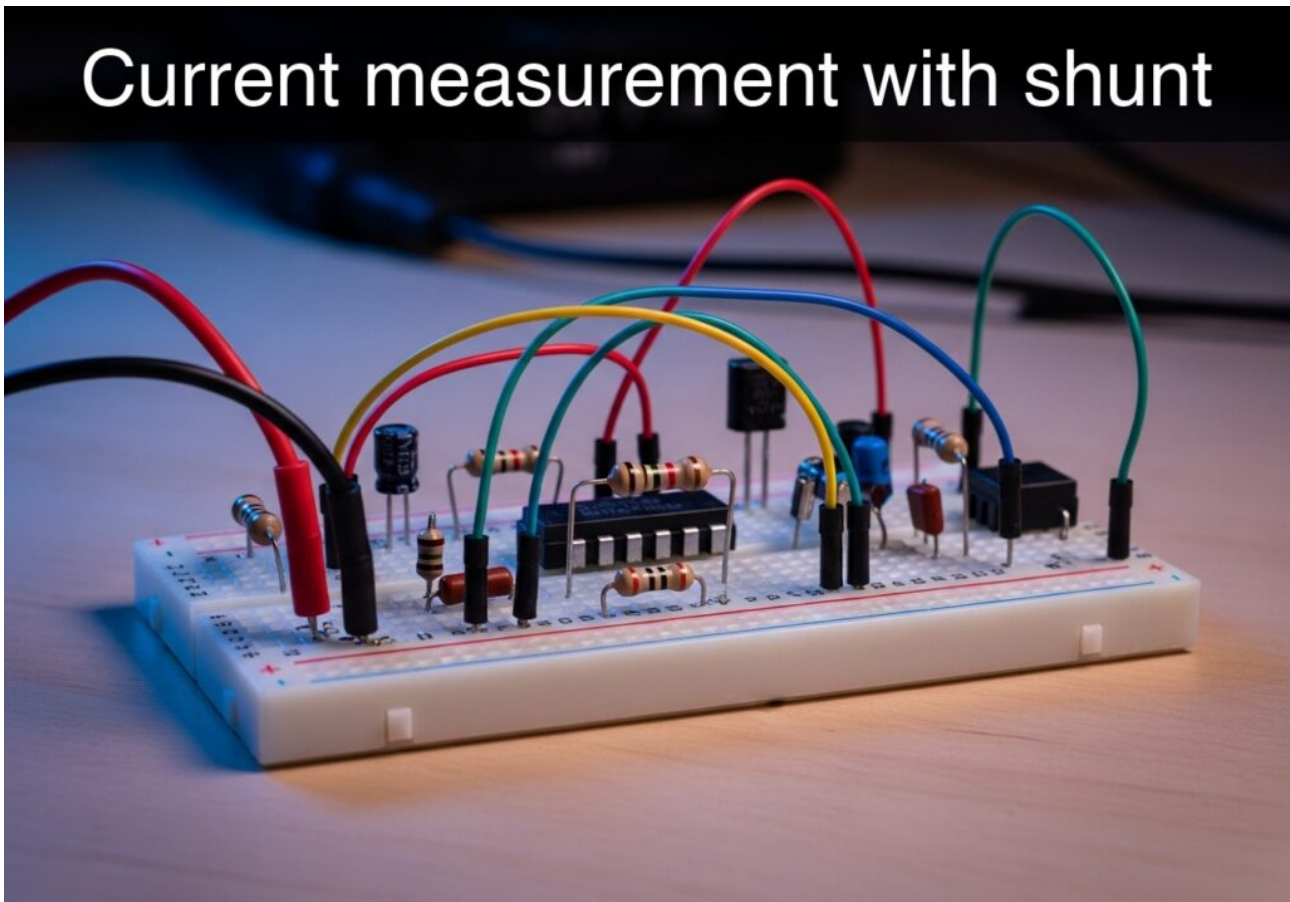


Practical case: Current measurement with shunt

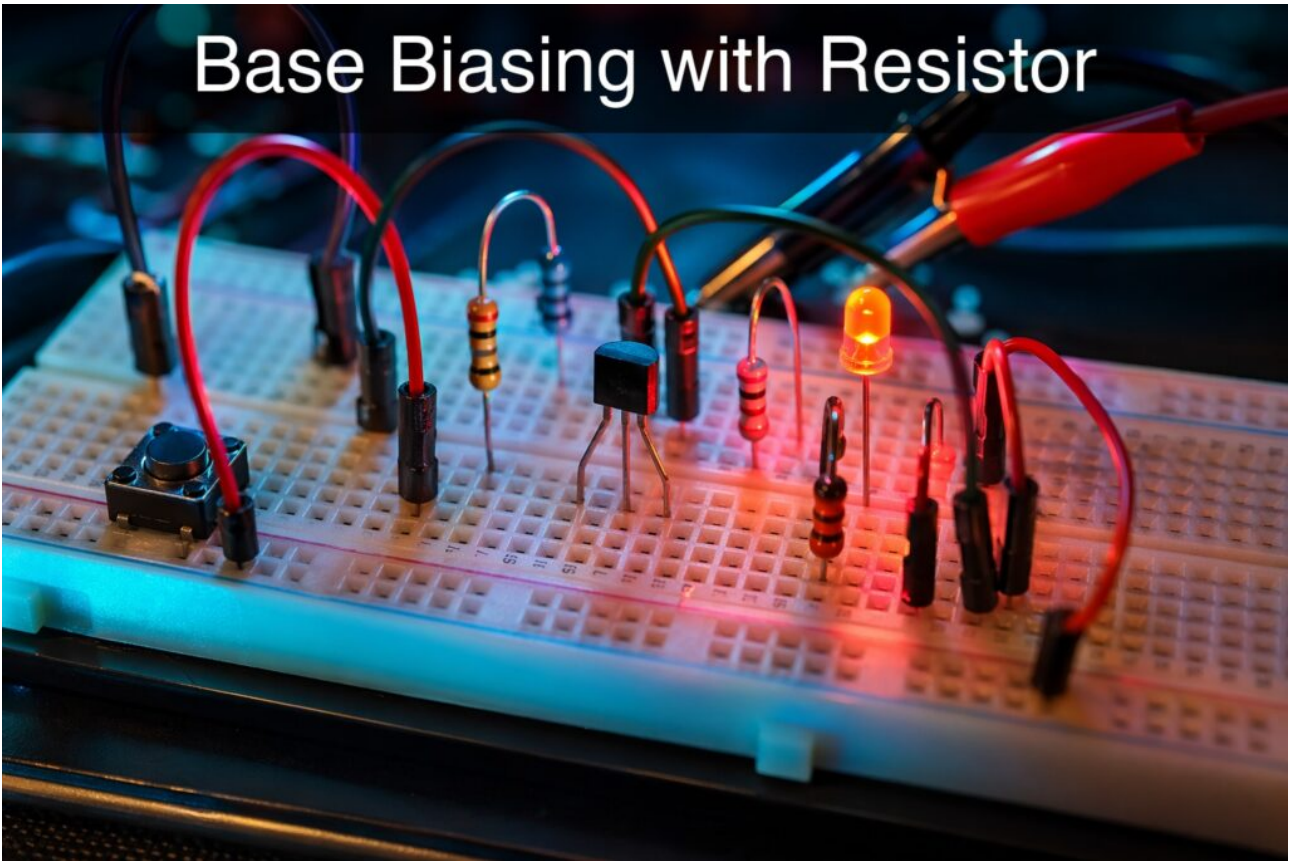


Level: Medium - Use a very low-value resistor to indirectly measure a DC load's current via voltage drop.

Objective and use case
You will build a direct...

Practical case: Base Biasing with Resistor

Base Biasing with Resistor



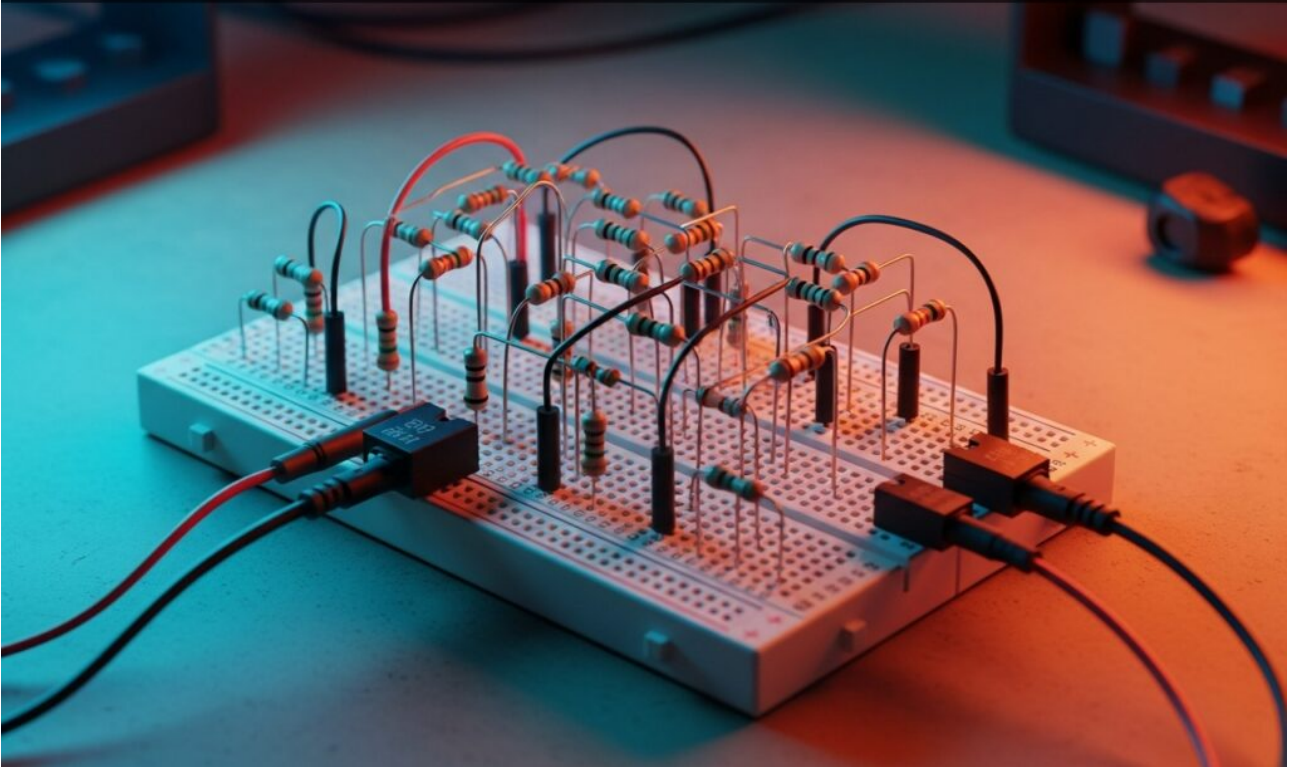
Level: Medium — Calculate and verify a base resistor to switch an NPN transistor safely from a logic output.

Objective and use case

You will build a...

Practical case: R-2R Resistor Network (Simple DAC)

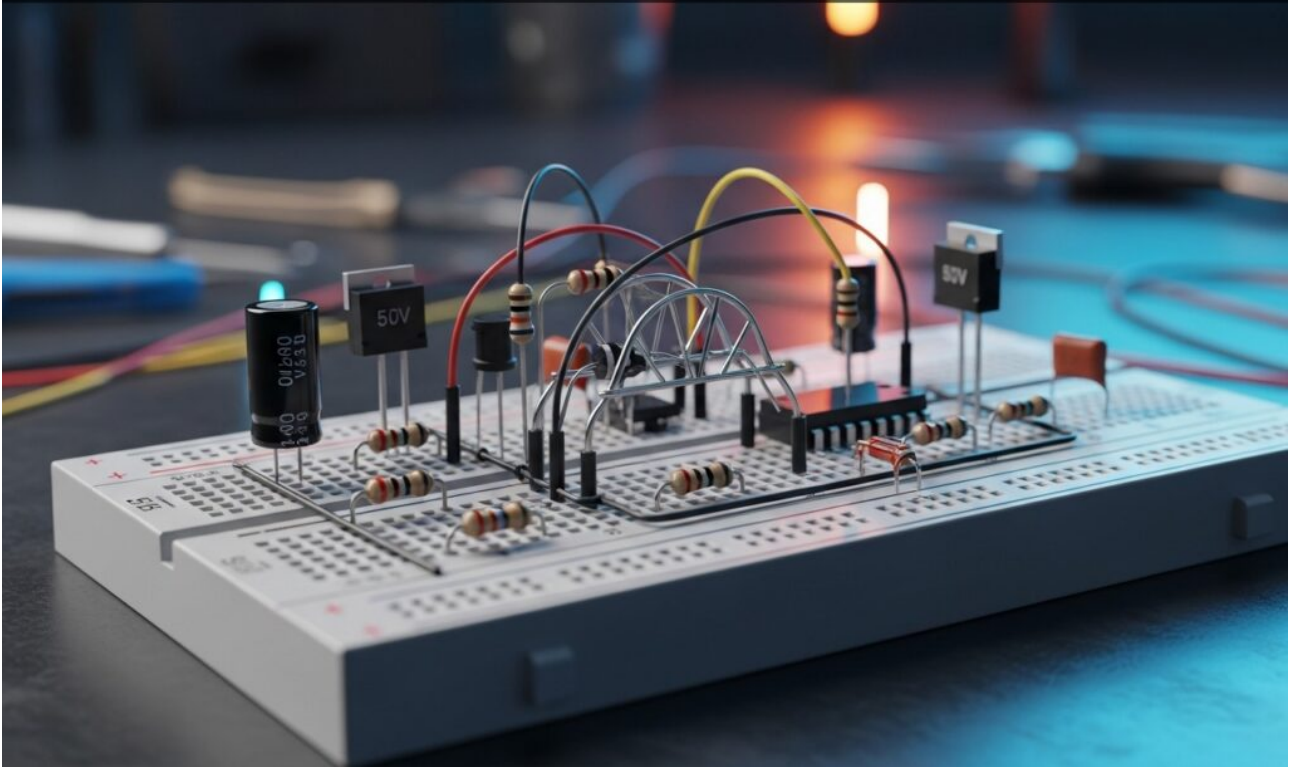
R-2R Resistor Network (Simple DAC)



Master Analog Electronics by building a 4-bit DAC using a Resistor ladder. Create precise voltage steps from binary signals for audio synthesis and control.

Practical case: Unbalanced Wheatstone Bridge

Unbalanced Wheatstone Bridge



Master Analog Electronics by building a Wheatstone bridge with a Resistor sensor. Measure precise differential voltage changes and calibrate zero-point offsets.