<https://en.wikipedia.org/wiki/High_impedance>

In [digital circuits](https://en.wikipedia.org/wiki/Digital_circuit), a **high impedance** (also known as **hi-Z**, **tri-stated**, or **floating**) output is not being driven to any defined logic level by the output circuit. The signal is neither driven to a logical high nor low level; this third condition leads to the description "tri-stated". Such a signal can be seen as an [open circuit](https://en.wiktionary.org/wiki/open_circuit) (or "floating" wire) because connecting it to a low impedance circuit will not affect that circuit; it will instead itself be pulled to the same [voltage](https://en.wikipedia.org/wiki/Voltage) as the actively driven output. The combined input/output pins found on many [ICs](https://en.wikipedia.org/wiki/Integrated_circuit)are actually tri-state capable outputs which have been internally connected to inputs (resulting in [three-state logic](https://en.wikipedia.org/wiki/Three-state_logic) or [four-valued logic](https://en.wikipedia.org/wiki/Four-valued_logic)). This is the basis for [bus](https://en.wikipedia.org/wiki/Computer_bus)-systems in [computers](https://en.wikipedia.org/wiki/Computer), among many other uses.

<http://www.electronics-tutorials.ws/logic/pull-up-resistor.html>