

## 1 | BJT

The bipolar transistor consists of three alternating semiconductors (such as NPN or PNP) and a emitter, collector, and base.

These are used in basic circuits for Digital Logic.

### 1.1 | NPN

A NPN BJT transistor consists of a heavily doped N-type "emitter" on one edge, a thin and lightly doped P-type "base" in the middle, and a moderately doped "collector" on the other edge. The transistor is activated through manipulation of the base current which through manipulation of the middle zone regulates the stronger collector current.

:WARN:/ Conventional current is OPPOSITE electron flow. Current is what is amplified.

The emitter-base

### 1.2 | PNP

## 2 | MOSFET