

Moore's law - by Hugo Ernesto

Moore's law observes that the density of transistors integrated in a circuit doubles every two years.

This observation has now become not applicable due to some limitations:

As the number of transistors grows, the power consumption grows and consequently the temperature also elevates, and may reach a point that wouldn't be handled by just air cooling.

The transistor's voltage scaling, a practice with the objective to reduce power consumption, has reached a threshold that no longer can be lowered because, it doesn't prevent power leakage between transistors now that more devices are portable i.e. using batteries and also it's required to differentiate when a transistor is high or low.