

Moore's Law states that the number of transistors on a microchip doubles every two years, and the cost of computation is halved. The rate of the prediction is true from 1975 to 2012 but not anymore because of some limitation that is encountered nowadays.

1. As the transistor increases, so as the power consumption, which increases the heat in the System.
2. power increases as transistor density increases.
3. Voltage scaling is limited due to noise or threshold voltage.
4. Transistors need a minimum voltage to switch and voltage reduction has lower limits.
5. Smaller transistors switch faster as compared to the bigger ones.
6. Power leakage can not be prevented on scaling voltage.
7. Voltage scaling reduces dynamic power consumption.