**Moore’s Law:** Moore's law is an observation and projection of a historical trend. Moore's law is the observation that the number of transistors in a dense integrated circuit doubles about every two years.

**Moore’s law and physical limitations:**

1. Power increases as transistor density increases.

2. Temperature increases as power increases

3. Voltage scaling reduces (dynamic) power consumption

4. Voltage scaling cannot prevent leakage power loss

5. Voltage scaling is limited due to noise or threshold voltage.