**Moore's Law no longer working?**

**Moore’s law:** The number of transistors on a microchip doubles every year.

**It is no longer working because:**

1. **The problem of high power:** the increase in the number of transistors on a chip each year leads to an increase in power consumption.
2. **High temperature problem:** Due to higher power consumption, high temperature rise occurs.
3. **Scaling cannot continue indefinitely:** It is not possible to achieve very low voltages for physical reasons.
4. **Voltage noise immunity problem:** At low voltage it is difficult to distinguish voltage fluctuations from noise.
5. **Increased Power Leakage:** With smaller transistors and tighter placement on the die, the insulator between the transistors becomes thinner, thereby increasing power leakage.