MOORE'S LAW

Moore's law definition:

The number of transistors per square inch on an integrated circuit doubles about every two years. The law is named after Gordon Moore who first made this observation in 1965.

Why is Moore's law not true now:

1. As no of transistors on a chip increase, there is an increase in power consumption which increases heat
2. Smaller transistors switch faster
3. Exponential increase in density would lead to exponential increase in speed
4. Transistors need a minimum voltage to switch and voltage reduction has lower limits due to noise
5. Dynamic power consumption is reduced by voltage scaling
6. Voltage scaling does not prevent power leakage