

The goal of this activity is to define Moore's law and describe the physical limitations in devices that have stopped it from continuing to be true.

Define Moore's law and explain why it has now stopped being true. Be sure to describe all of the physical limitations that have prevented Moore's law from continuing to be true.

- 1) The increase in transistors will lead to more power consumption
 - a) Especially challenging for laptops / portability
- 2) The high power leads to higher temperature
- 3) Fan can only remove so much heat until melting cannot be prevented
- 4) From Dennard scaling, we know that voltage should scale with transistor
 - a) Voltage cannot get too low to lower temperature
 - b) So Dennard scaling will stop