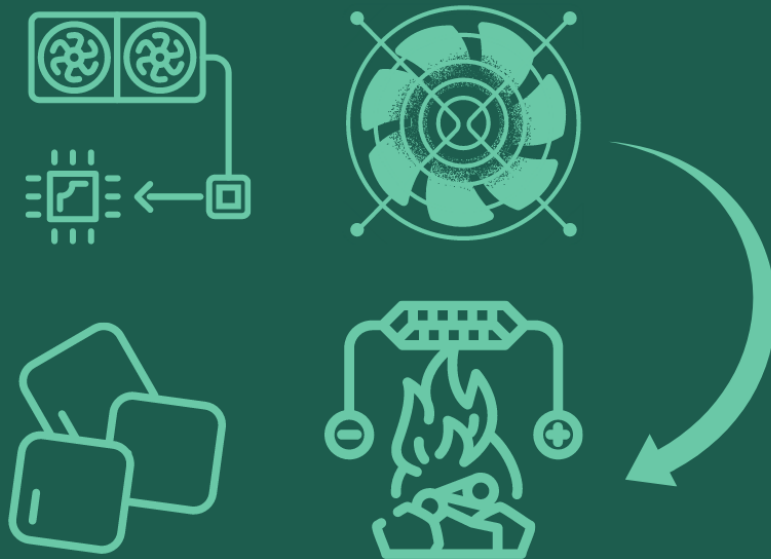


## CPUs

- Transistor sizes have been shrinking over the past 40 years, with the maximum possible transistor density doubling every two years
- Following the increase in transistor counts, the heat flux of processors has been increasing, and keeping a processor cool is essential
- The capabilities of CPUs reach a limit if cooling performance is not increased



## Utilizing Heat

- Common cooling solutions use fans or water loops, but these methods end up releasing the heat into the environment without utilizing it
- Heat can be stored with either thermochemical, phase change, or sensible thermal energy storage, and can then be turned into electricity with a thermoelectric module