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Parallel Computing

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HW1

1. Moore’s law describes the tendency that transistors on a chip doubles every two years, meaning performance effectively could double. Devices tend to not increase in size, but decrease. Meaning chip technology with additional transistors clearly are produced through better manufacturing. At some point you reach a stage where transistors are minimized till where if there are anymore the amount of heat generated could cause chips to be inoperable. To battle this one method is to employ cheaper and less complex chips in parallel architectures.
2. Greater power consumption does not mean the best efficiency.

More cores does not guarantee better performance.

Some processor peak TFlop/s can almost double the max TFlop/S.

Power consumption does not increases TFlop/s