OPENMP

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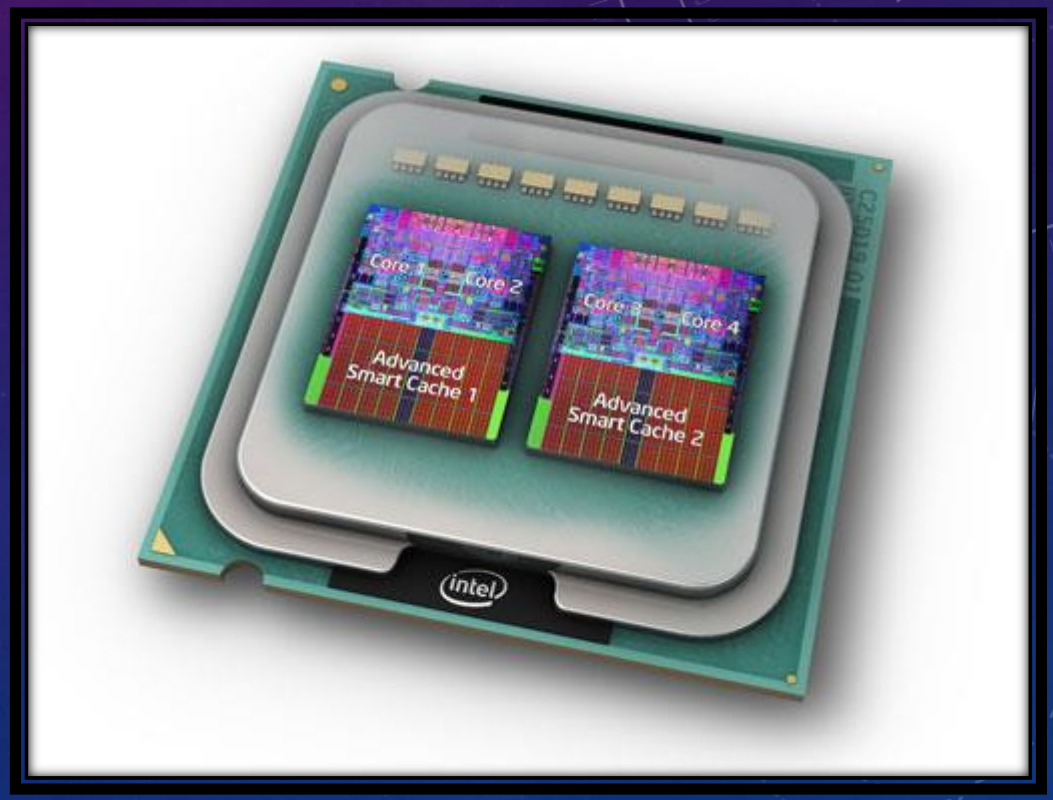
WHY PARALLELIZE?

- CPU clocks not going up; becoming multiprocessor/multicore
- Need to harness power of CPUs
  - Traditional serial code = boring & slow



WHAT IS OPENMP?

- API for parallel programming in C and C++
  - Supported by GCC “-fopenmp”
- Supports most processor architectures, OS
- Simple, flexible interface for developing parallel apps

HOW DOES IT WORK?

- Implicit fork/join model
- Regions of code where instructions shared
  - Loops
  - Nested loops
- Use “#pragma omp parallel” directive
  - Other directives on Reference Card