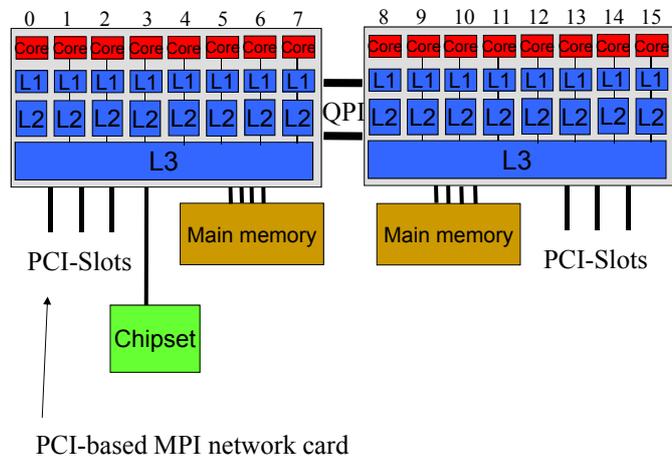


OCuLUS: Intel E5-2670 „Sandy Bridge“

- 8 Kerne pro Prozessor, 2.6 GHz
- 32 nm, ca. 2.4 Mrd. Transistoren
- 256 bit AVX SIMD-Einheiten
- je Kern
 - 32 kByte L1-D-Cache, 8-wege
 - 256 kByte L2-Cache, 8-wege
 - 64 Byte Cache-Lines
- 20 MByte L3-Cache
- Speichercontroller
 - 4 Speicherkanäle, DDR3-1600
- MESIF Cache-Kohärenzprotokoll
- Quick Path Interconnect (QPI)
 - Bidirektionaler Link
 - 20 Bits, 8 GT/s, 20 GByte/s
- PCIe 3.0 on-chip



Exercises

- STREAM-Benchmark
 - Use the OpenMP version of the benchmark to analyze the performance of the OCuLUS system.
- MPI Benchmark (IMB)
 - Compile and run the Intel MPI Benchmark
 - Compare the performance of the ARMINUS and OCuLUS System
- NAS Parallel Benchmark
 - Compile and run the MPI version of the NPB Multi-Zone
 - Analyze the performance of the ARMINIUS system