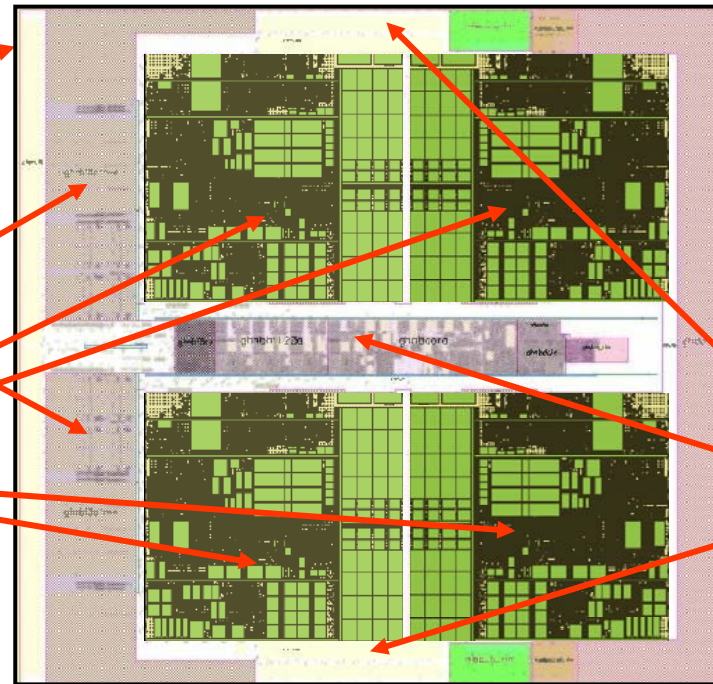


# AMD's Next Generation Processor Technology



Native quad core die

Expandable shared L3 cache

IPC enhanced CPU cores

- ▶ 32B instruction fetch
- ▶ Improved branch prediction
- ▶ Out-of-order load execution
- ▶ Up to 4 DP FLOPS/cycle
- ▶ Dual 128-bit SSE dataflow
- ▶ Dual 128-bit loads per cycle
- ▶ Bit Manipulation extensions (LZCNT/POPCNT)
- ▶ SSE extensions (EXTRQ/INSERTQ, MOVNTSD/MOVNTSS)

Optimized for 65nm SOI and beyond

Enhanced Direct Connect Architecture and Northbridge

- ▶ HyperTransport™ links (5.2GT/sec)
- ▶ Enhanced crossbar
- ▶ DDR2 with migration path to DDR3
- ▶ FBDIMM *when appropriate*
- ▶ Enhanced power management and RAS