Delivering breakthrough performance for highly parallel applications and the many benefits of programming to Intel® Architecture with familiar programming models, techniques, and developer tools. Relative to the multi-core Intel® Xeon® processors, Intel® MIC Architecture has many more smaller cores, many more hardware threads, and wider vector units. This is ideal for achieving higher aggregate performance for highly parallel applications.

The first Intel® MIC product, codenamed "Knights Corner," is planned for production on Intel's 22 nm technology featuring the world's first 3-D Tri-Gate transistors. Intel is currently shipping software development platforms, codenamed "Knights Ferry," to selected development partners.

Greater programmer productivity, shorter time to market
As developers embrace high degrees of parallelism (instruction, data, task, vector, thread, cluster, etc.), important and popular programming models for Intel® Architecture processors extend to Intel MIC Architecture without rethinking the entire problem. The same techniques that deliver optimal performance on Intel® processors — scaling applications to cores and threads, blocking data for hierarchical memory and caches, and effective use of SIMD — also apply to maximizing performance on Intel MIC Architecture.

With greater reuse of parallel CPU code, software companies and IT departments benefit from creating and maintaining a single code base binary and not having to re-train developers on proprietary programming models associated with accelerators.

Get started today!
Optimizing for Multicore with Intel Xeon processors is the best path to make your parallel applications ready for Intel MIC products. Learn more at intel.com/software/products