For developers of complex algorithms using FPGA for prototyping or deployment, DK Design Suite provides the most comprehensive C-based solution available. DK Design Suite makes it easy to compile C code onto an FPGA and iterate on the implementation to improve performance and/or area.

FLEXIBILITY OF C WITH POWERFUL SYNTHESIS DIRECTIVES
The power of DK Design Suite comes from the Handel-C development environment enabling the developer to direct the C synthesis for uncompromised Quality of Results while offering enhanced productivity. DK Design Suite maintains a single source for simulation and implementation giving the developer a fast, automated solution from algorithm change to new implementation.

PRODUCTION PROVEN
Since introduction in 2002 DK Design Suite has produced thousands of FPGA prototypes and implementations for a variety of applications. With more than 15 years of R&D investment and hundreds of installed users, DK Design Suite has the advantage maturity brings with complete training courses, design libraries, template designs and user documentation while continuing to push the state-of-the-art on C to FPGA synthesis.

**BENEFITS**
- Complete design flow from C to FPGA
- Fastest path to algorithm implementation
- Short turn-around for algorithm prototypes
- Seamless integration with supported FPGA development hardware

**FEATURES**
- Direct synthesis from Handel-C to Altera and Xilinx FPGA
- Data Streaming Manager facilitates partitioning and interface between embedded processors and FPGA hardware
- Source code profiling with time/area estimates for optimization
- Exploits architecture specific features of FPGA
- Outputs VHDL or Verilog for SoC implementation hand-off
- Fully integrated with Agility RC platforms
- Integration with leading third party simulators
MAKES FPGAS EASY TO USE

DK Design Suite combined with Agility RC platforms and design libraries removes the majority of time consuming details that must be scheduled and considered when using a custom FPGA approach. With DK developers are free to focus on the actual task whether it is algorithm exploration, rapid prototyping or product implementation. With DK, algorithm implementation to FPGA hardware can be performed by software development teams, and design schedules are reduced from months to weeks.

RAPID PROTOTYPING

Developers using DK can take advantage of Agility's range of design libraries and template designs to deliver a prototype in less time. These proven starting points called Platform Developer’s Kits (PDK) augmented with optimized function libraries and the DK Design Suite environment enable developers to quickly achieve the functionality and performance required for the prototype. Some of the template designs available include: examples for using RC platform peripherals (Ethernet, touchscreen, USB, etc.) and complete algorithm examples (Mandelbrot, Ping, Life, etc.).

PRODUCT IMPLEMENTATION

Once the algorithm is validated, the focus turns to implementation and integration into the real product. DK supports both hand-off and integration of the design. Hand-off in the form of standard HDL descriptions in either Verilog or VHDL and integration with leading model-based system design tools like the MathWorks Simulink® and connections with leading processor instruction set simulators, SystemC and HDL simulators.