FUJITSU

DATASHEET
FUJITSU COMPILER

ADVANCED COMPILER

The Fujitsu compiler system is a high performance, production quality code generation tool designed for high performance parallel computing workloads. The Fujitsu compiler environment provides the developer the essential choices when building and optimizing C, C++, and Fortran applications.

The Fujitsu compiler is optimised for the SPARC64 VIIIfx and IXfx processors. It is part of Fujitsu's original HPC middleware, Technical Computing Suite. The SPARC VIIIfx processor is used in the "K computer" supercomputer, and the SPARC64 IXfx processor is used in the PRIMEHPC FX10 supercomputer.

The Fujitsu support tools (IDE, Debugger, Profiler) provide an integrated development environment for building, editing, debugging, source code browsing, and tuning application software development projects. It includes an OpenMP code generator and is based on a client/server/executor architecture.

Fujitsu is aiming to bring about a "Human Centric Intelligent Society" by contributing to a prosperous future for society and customers through the development of supercomputers.

OPENMP FEATURES

Thread to Processor Affinity

The runtime library has the ability to bind OpenMP threads to separate cores on a chip in the case of a multicore chip, and to the different kernel threads on a core if multi-threading is enabled.

OpenMP Nested Parallelism

Fujitsu was one of the first compiler vendors to implement OpenMP's nested parallelism.

Loop Fusion for WORKSHARE Construct

In our implementation of the WORKSHARE construct, the Fortran 90 elements are expanded into loops, and the loops are fused using data dependence analysis by taking into account the characteristics of the original statements. For efficiency of the generated code, loops must be fused as much as possible.

Version Support

The compiler currently supports OpenMP 2.5, and support for OpenMP 3.0 is planned for spring 2012.

FUJITSU SOLUTIONS

In addition to the Fujitsu Compiler, Fujitsu provides a range of solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Computing Products
www.fujitsu.com/global/services/computing/

Software
www.fujitsu.com/software/

MORE INFORMATION

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FUJITSU GREEN POLICY INNOVATION

FUJITSU Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT. Please find further information at www.fujitsu.com/global/about/environment/

Green Policy Innovation

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