

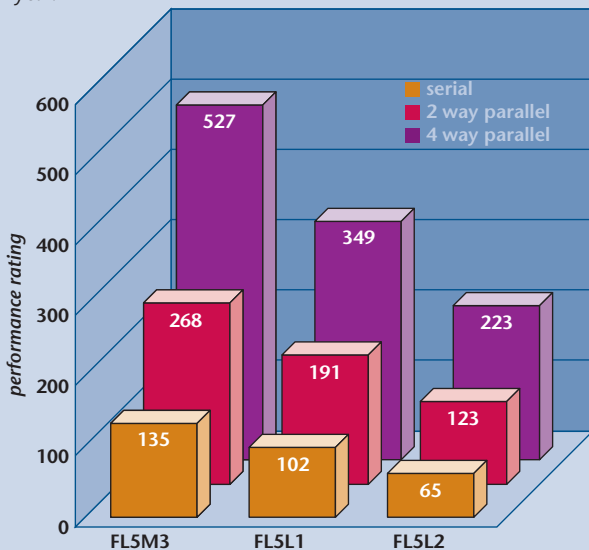
# FLUENT on Itanium

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Intel's introduction of the Itanium processor family has expanded the range of high performance computing options available to FLUENT users. In collaboration with Intel, Hewlett-Packard, SGI, and NEC, Fluent has successfully ported and optimized FLUENT for the Itanium processor family running the Linux and HP-UX operating systems. The resulting performance of FLUENT 6.1.22 on Itanium is outstanding, with benchmarks showing Itanium as one of the top performing systems for which data is currently available. Data for serial and parallel performance on the HP RX5670 and HP RX2600 systems with 1.5 GHz Itanium2 processors is available at [www.fluent.com/software/fluent/fl5bench/index.htm](http://www.fluent.com/software/fluent/fl5bench/index.htm). Performance data on the SGI Altix 3000 and NEC TX7 systems will be available in the future.

Extensive optimization efforts were undertaken and involved the Intel C++ Compiler 7.1 and ancillary tools such as Vtune. Some unique features of the Itanium architecture were exploited for optimal performance. The resulting code has been qualified through the standard Fluent QA systems, and has been performance-tested on several vendor systems running the standard FLUENT benchmarks suite.

FLUENT performance optimization for IA64 has been a profound success, thanks to the collaborations with Intel, HP, SGI, and NEC. The broad availability of FLUENT on the Itanium family now offers customers exciting new options for high performance computing on 64-bit operating systems. A Windows Itanium 64-bit port is planned for FLUENT 6.2, which is due later next year. ■



FLUENT's parallel performance scaling on HP RX5670 running Linux for selected standard benchmarks