

During the international supercomputers conference SC06 of 11.11. - 17.11.2006 in Tampa (Florida, USA), became the 28th list of the TOP500 presented. Under the 500 world-wide fastest supercomputers at the center for Information Services and High Computing Performances (ZIH) of the TU Dresden reached installed SGI system Altix 4700 the place 49. Thus this system - behind the two computers at the NIC in the research center Juelich and at the Leibniz computing centre in Munich - reserves momentarily the seat three in Germany. Remarkably this is above all, there less with the procurement on the pure arithmetic performance, but one paid attention to a fast binding of the computer to the non removable disk and magnetic tape memory systems. The new HPC system consists of 1024 Intel Itanium-2 Montecito processors (1,6 GHz, 18 MByte Cache) with a main storage of 6,5 TByte and offers with a high component density an obtained maximum performance of more than 11.9 trillion flow point operations per second (11.9 TFLOPS), so that a user can expect ever larger tasks very fast results. Also the second straight installed computer - a PC farm of the AMD Opteron series (2,6 GHz) with altogether 2592 processor cores, supplied by Linux Networx - could incorporate itself with an achievement of more than 6 TFLOPS at place 106 in the TOP500-Liste and is thereby on place six in Germany.

Both systems are momentarily in the acceptance phase and starting from beginning next year gradually to the users are handed over.

For a technical-industrial research environment adapted equipment of the computer infrastructure is a strategic condition for the achievement of attractive results of research. This particularly applies to the location Dresden, with which with the established research directions in physics, mechanical engineering and chemistry, hydrology and meteorology, in addition, the new settlements by Max Planck institute for molecular cell biology and genetics (MPI CBG) and that biotechnological center (BIOTEC) sciences must be supplied with high analysis potential data and computationally appropriately.

The general complex realized now a substantial extension of the computer capacities, those scientific counting (simulationen of most different kind, for example tide forecast, meteorology etc.), in particular in addition, dataintensive applications for example from bio computer science and the life sciences to property will come. As national computer with entrance for all science orders in completely Saxonia conceived and laid out, this computer system strengthens the efforts of the Free State toward the lasting support of the innovative research in the country.

The Center for Information Services and High Computing Performances (ZIH) is a central scientific mechanism DOES Dresden with accompanying research in the full spectrum of the fields of application. It is responsible for the entire communication infrastructure of the university and operates the central servers and services as well as the high-performance computers of the TU Dresden. Besides it supports all science directions as interdisciplinary aligned center during processing of tasks in research and theory within all IT relevant ranges.