Decommissioned SMP I IBM pSeries 690
aka: Shared Memory System I

Overview

This computer, operated at LRZ between 2002 and 2006, served commercial AIX-applications as well as serial or parallel programs with high memory requirements. The platform served also as a successor of memory-server-nodes, formally accessable at IBM-SP2.

Hardware details:

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<tr>
<td>Peak performance</td>
<td>42 GFlop/s</td>
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<tr>
<td>Number of CPUs</td>
<td>8 (Power 4)</td>
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<tr>
<td>Main memory</td>
<td>32 GByte</td>
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<tr>
<td>Disk space</td>
<td>936 GByte</td>
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Charakteristik:

- Shared memory
- Many commercial applications, libraries and tools
- Parallization via message passing: MPI, PVM and other libraries
- Parallization via OpenMP or automatically by the compiler

Fields of application:

- Parallel programs (MPI or shared memory)
- Many commercial applications

Hardware and Operating Environment

For computing tasks with very high memory requirements and for running commercial applications not available for other LRZ platforms an 8-way IBM p690 "Regatta " Symmetric Multiprocessor is now available. It contains eight Power 4 processors running at 1.3 GHz; Peak performance per processor is 5.2 GFlop/s, hence that of the complete machine is 41.6 GFlop/s, of which presently 75-80 % can be obtained for optimally tuned code. For production code the usual efficiency will probably be around 15 %. All processors are equipped with 32 kB 1st level data cache and 1440 kB 2-nd level cache. The 8 processors share 256 MB of Level 3 cache;

The machine has a memory capacity of 32 GB; batch jobs as well as interactive programs will run simultaneously.

The machine was run under AIX 5.1.