TOP500® JUNE 2009

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UNIVERSITY OF MANNHEIM
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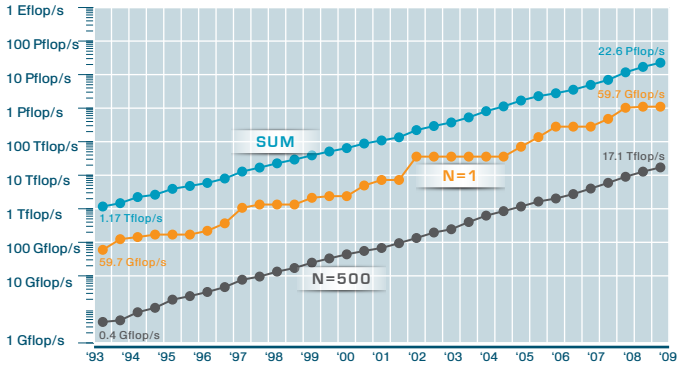
ICL UT INNOVATIVE COMPUTING LABORATORY
http://icl.cs.utk.edu/

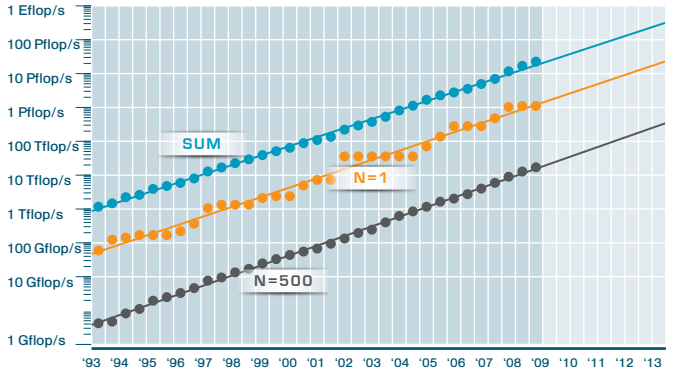
BERKELEY LAB
http://www.lbl.gov/

	MANUFACTURER/COMPUTER	LOCATION	COUNTRY	CORES	R_{max}
1	IBM BladeCenter QS22/LS21, PowerXCell 3.2 Ghz / Opteron 1.8 GHz, Voltaire Iband	DOE/NNSA/LANL	USA	129600	1105000
2	Cray XT5 QC 2.3 GHz	DOE/OS/ORNL	USA	150152	1059000
3	IBM Blue Gene/P Solution	Forschungszentrum Juelich	Germany	294912	825500
4	SGI Altix ICE 8200EX, Xeon QC 3.0/2.66 GHz	NASA/Ames Research Center/NAS	USA	51200	487005
5	IBM BlueGene/L - eServer Blue Gene Solution	DOE/NNSA/LLNL	USA	212992	478200

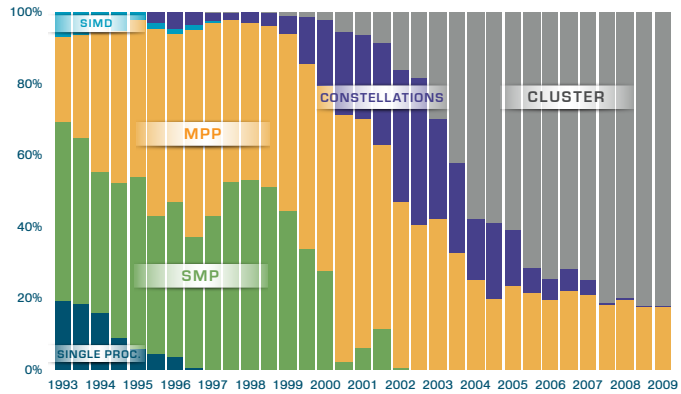
PERFORMANCE DEVELOPMENT



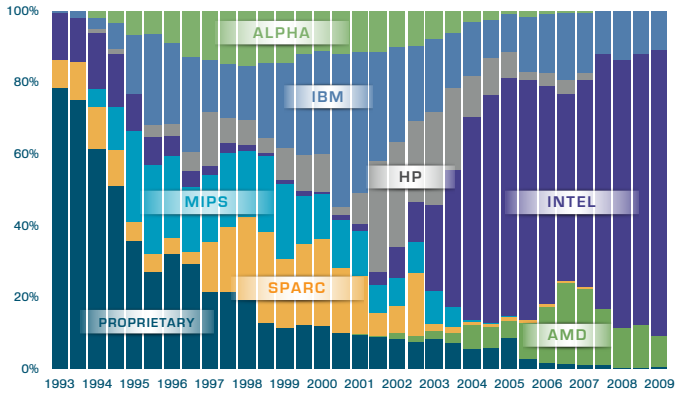
PROJECTED PERFORMANCE DEVELOPMENT



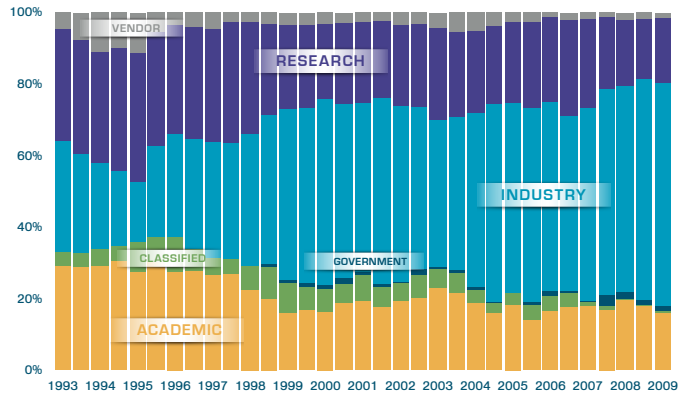
ARCHITECTURES



CHIP TECHNOLOGY



INSTALLATION TYPE



HPLINPACK

http://icl.cs.utk.edu/hpl/

A Portable Implementation of the High Performance Linpack Benchmark for Distributed Memory Computers

Algorithm: recursive panel factorizations, multiple lookahead depths, bandwidth reducing swapping

Easy to install, only needs MPI + BLAS or VSIPL

Highly scalable and efficient from the smallest cluster to the largest supercomputers in the world