

RISC

Abbreviation for **R**educed **I**nstruction **S**et Computer (or **R**eally **I**nvented by **S**eymour **C**ray). These are processors having only a few simple instructions which can be executed very fast.

Vector

Vector processors are optimized to process large numerical arrays. Special registers and computing-units are integrated which produce one result per clock-cycle after only a short startup time. Today this architecture is also being referred to as pipelining.

Contact Information:

www.cray-cyber.org
mail@cray-cyber.org

Staeblistrasse 10b
81477 Muenchen
Germany

Guided tours upon appointment.

Donation Information:

Account Number: 221 176 9
Owner: Gesellschaft fuer historische Rechenanlagen e. V.
Bank Code: 700 932 00
Bank Name: Raiffeisenbank Starnberg
Description: Cray-Cyber
BIC: GENODEF1STH
IBAN: DE 15 70 09 32 00 02 21 17 69

Cray-Cyber.org is a subsidiary of the „Gesellschaft fuer historische Rechenanlagen e.V.“ (www.gfhr.de)

© Cray-Cyber.org 2003

Cray is a registered trademark of Cray Inc.



The First Historical Museal Computer Center



The objective of Cray-Cyber.org is to preserve and document the technology of large-scale computing. The main focus is on supercomputers used for scientific research. The most significant developments in this area were achieved by *Seymour R. Cray*.

This is the reason why the museal computer center operates machines built by the companies *Control Data* and *Cray Research*, which exemplify the innovative architectural concepts.

Additionally, the peripherals necessary to demonstrate the historical computer center operation are available and functioning.

This implies that the machines are preserved and run with the original operating systems and applications.

Furthermore it is possible to log on to those machines using the internet and gather own experiences with them.

In addition to the historical systems, less ancient supercomputers made by *NEC* are operated in order to show the development based upon the architectures mentioned above.



Control Data Cyber 960-31

Manufactured: 1989
CPU-Architecture: RISC
Number of CPUs: 1
Main Memory: 128 MByte
Computing Power: 2,5 MFLOPS
Consumption: 10 kW



Cray YMP-EL

Manufactured: 1991
CPU-Architecture: Vector
Number of CPUs: 4
Main Memory: 1 GByte
Computing Power: 532 MFLOPS
Consumption: 3 kW



NEC SX-4B/2A

Manufactured: 1996
CPU-Architecture: Vector
Number of CPUs: 2
Main Memory: 4 GByte
Computing Power: 3,6 GFLOPS
Consumption: 5 kW