CRAY T916 System Highlights

- Full binary compatibility with CRAY C90 line
- 8 or 16 processors
- Approximately 32 GFLOPS peak performance
- MPP ready
- 2048 to 4096 Mbytes of central memory
- Memory bandwidth of more than 400 Gbytes/s
- Aggregate I/O bandwidth greater than 17 Gbytes/s
- Optional SSD with 4096 to 16,384 Mbytes
- UNICOS operating system based on UNIX System V

916

Configuration flexibility offers superior scalability

To meet the demands of your growing business, the CRAY T916 system is extremely scalable: as you add more processors, your performance improves almost linearly. To provide an even more scalable parallel processing path, Cray Research SuperCluster software allows users to efficiently cluster Cray Research systems with equipment from other computer vendors. Acting as a node in a clustered environment, the CRAY T916 system can distribute applications and balance workloads across its internal processors, eliminating the network transfer delays (latencies) that typically compromise performance in clustered workstation environments.

Powerful UNIX software taps the speed of the hardware

To ensure that your applications take full advantage of the CRAY T916 system performance, Cray Research provides the UNICOS operating system and associated system software products. UNICOS is a standard UNIX environment that has been enhanced to provide efficient parallel processing, production

quality resource management, security, and network connectivity. With over twelve years of parallel UNIX experience, Cray Research provides the reliable operating system environment required for high-performance simulation. User productivity is enhanced through the use of visual interfaces, advanced application-building tools, expert performance analysis tools, and automatic optimization tools.

Applications support delivers the best possible performance

Thanks to our standards-based implementations, our system software transparently delivers scalable application performance. Our industry-leading compilers automatically parallelize, vectorize, and scalar-optimize standard applications to deliver the best possible performance from your CRAY T916 system.

To provide more choices and to further enhance our standards in precision, we also offer IEEE floating point compatibility. In addition, IEEE compatibility enhances compatibility with workstations and makes it easier to port IEEE-based application codes to the CRAY T916 system.

CRAY T916 Product Specifications

Processor

Technology	Custom silicon 50,000 gate array circuits
Number of processors	8 or 16
Vector pipes	2 per processor
Peak performance	Approximately 32 GFLOPS

Memory

Technology	4 Mbit static RAM
Memory size	2048 or 4096 Mbytes
Maximum memory bandwidth	More than 400 Gbytes/s

I/O

Number of I/O clusters	1 to 16
I/O bandwidth	Greater than 17 Gbytes/s
Max. LOSP channels	16
Max. HISP channels	16
Max. VHISP channels	8

Optional SSD

Capacity	4096, 8192, 12,288, or 16,384 Mbytes
Bandwidth	More than 14 Gbytes/s

Physical characteristics

Mainframe cabinet footprint area	7.5' x 5' x 5' (2.3 m x 1.5 m x 1.5 m)
Cooling unit area	3.6' x 4.2' x 5.5' (1.1 m x 1.3 m x 1.7 m)