

Attachment

HX600 High-Performance Computing Server: Key Features and Specifications (The HX600 is sold only in Japan)

The HX600 is a high-performance computing server using the Quad-Core AMD Opteron™ 8300 Series processors. A four-CPU node comes in a 2U rackmount form factor, with nodes connected by InfiniBand™ DDR interconnects, resulting in a readily expandable, compact, and fast supercomputing cluster.



HX600

Key Features

1. High-performance computation node
 - Runs on the AMD Opteron™ 8300 series of quad-core processors.
 - Four CPUs per node for high floating-point performance.
2. Large, fast main memory
 - Direct Connect Architecture gives fast access to main memory.
 - Uses ECC DDR2 memory; can accommodate up to 128 GB.
3. High-density installation
 - Compact design allowing nodes to have a 2U rackmount form factor.
 - Each node includes six PCI-Express(x8) slots.
4. Interconnects
 - HyperTransport™ high-speed intra-node interconnects.
 - InfiniBand™DDR (2GBps) inter-node interconnects, with up to four per node; accommodates trunking for high-speed data transfers.

5. High-capacity, high-reliability storage

- Up to 600GB disk storage per node.
- Hardware-based RAID (RAID1).

Specifications

CPU	Processor	AMD Opteron Processor 8300 Series
	Clock	2.3 GHz
	Number of cores	4
	Cache	L1 cache (per core): 64 KB L2 cache (per core): 512 KB L3 cache (per CPU): 2 MB shared
Node	Number of CPUs	4
	Processing performance	147 gigaflops
	Memory capacity	ECC DDR2; 32 GB standard, 128 GB max
	Storage	146.8 GB x 2 standard, 300 GB x 2 max RAID 1 (hardware RAID)
	Inter-node connectivity	InfiniBand™ DDR (2 GBps) x 4
	Network interface	Gigabit Ethernet (1000BASE-T) x 2
Chassis	Dimensions	430 mm (481 mm including mount tabs) x 701 mm (774 mm including front handles) x 87 mm 2U rackmount
	Weight	Approx 21 kg
	Power supply	200 V AC ±10%; 50/60 Hz
	Power consumption	Max approx 780 W
Software	Supported OS	Red Hat Enterprise Linux v4