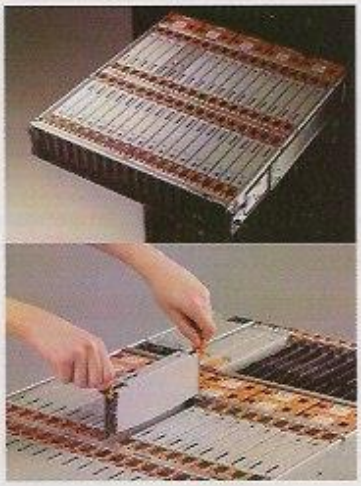
Empowered by Innovation NEC

Micro Modular Server
DX1000

CONCENTRATED VERSATILE PLATFORM FOR DATA CENTER SOLUTIONS



- EXTREME DENSITY
- EXCEPTIONAL ENERGY EFFICIENCY
- OUTSTANDING MANAGEABILITY

Extremely Dense and Flexible

The DX1000, an innovative micro modular server system, incorporates outstanding performance, performance per watt, flexibility, and enterprise-class reliability in an extremely dense design. With over 700 nodes per rack* and shared power, cooling, and networking resources, the DX1000 system provides maximum efficiency and availability. The DX1000 system operates in a 40 degree Celsius (104 degree Fahrenheit) environment, and accommodates flexible network and storage solutions in accordance with your system requirements.

Perfect for Datacenter Solutions

The DX1000, a 2U enclosure system with 46 Intel® processor-based micro modular servers, is designed for lightweight scale-out computing such as web hosting and big data analytics, as well as cloud services providers. The DX1000 is perfect as a concentrated versatile platform for data center solutions.

* Nearly 1000 (960) nodes in a 42U rack is physically possible. However, maximum server nodes for actual solutions will vary depending on the facility conditions and also other equipment mounted in the rack. (up to 700 server nodes in NEC solutions)

Extreme Density

- Incorporates up to 46 single-processor server modules in a 2U enclosure.
- Ultra-High Density compute node with the latest Intel® Atom® C2000 series 8-core processor, 4 DIMM slots, and 1 SSD slot.

Exceptional Energy Efficiency

- NEC's optimized cooling technology supports operation in a 40 degree Celsius (104 degree Fahrenheit) environment which minimizes cooling costs.
- Shared fan and power supply design with 80 PLUS® platinum certified power supply maximizes power efficiency.

Outstanding Manageability

- Extensive remote management capabilities for chassis and modules including out-of-band management of each server.
- All modules and shared components including fans, power supply units, Chassis Management Modules and switch modules are hot-swappable and easy to replace.

HARDWARE SPECIFICATION

Server Module*1	
Form factor	Server module that plugs into the Module Enclosure
Number of Processors	1
Processors	Intel® Atom™ Processor C2750 (2.40 GHz/8-core/4 MB) Intel® Atom™ Processor C2730 (1.70 GHz/8-core/4 MB)
Memory Type	DDR3-1600 ECC LV SO-DIMM
Memory Slots	4
Maximum memory	32 GB
Storage type	Non-hot plug mSATA SSD
Maximum internal storage	128 GB
Expansion slots	1 PCIe x8 Gen 2 slot (Using a server module slot, available for up to 12 server modules)
Network	2 2.5 GbE links to switch modules
Systems management	Embedded BMC with IPMI 2.0
Operating systems and virtualization software	Red Hat® Enterprise Linux® 6 Ubuntu 12.04

HDD Module*1	
Form factor	HDD module that plugs into the Module Enclosure *HDD module can be connected to a server module with Intel® Atom™ Processor C2750 only
Number of HDDs	1
Storage type	2.5 inch SATA 500 GB or 1 TB

Module Enclosure*1	
Form factor / height	Rack mount 2U
Server module slots	46 (16 slots can be used for HDD modules and 12 slots can be used for PCIe cards)
Network interconnects	Up to 2 switch modules and each has the following: 2 40GbE QSFP+ uplinks, 1 1000BASE-T for management, and 46 2.5GbE down links to server modules
Redundant cooling fan	Standard, hot plug
Power supplies	2 1,600 Watt 80 PLUS® Platinum certified hot plug power supply units 200-240 VAC ± 10% 50 / 60 Hz ± 3 Hz
Redundant power supply	Standard, hot plug
Temperature and humidity conditions (non-condensing)	Operating: 10 to 40° °C/ 50 to 104° °F, 20 to 80% Non-operating: -10 to 55 °C/14 to 131 °F, 20 to 80% * In specific configurations, the operable ambient temperature is up to 35°C/95°F
Dimensions (W x D x H) and maximum weight	448.0 x 777.4 x 88.5 mm / 17.6 x 30.6 x 3.4 in 34 kg / 74.96 lbs.

*1 Modules and enclosures are to be included in a rack as a solution and not sold separately.

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