Innovating and Integrating for Communications and Storage

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WHAT IS THE NEWS?
New details on Jasper Forest for Embedded, Communications and Storage

Robust Performance
Lower System Power

Integration for Savings

Workload Consolidation

Innovate
Integrate

27 WATT SAVINGS*

REAL ESTATE AND POWER

4 TO 1

Coming in early 2010

* Configurations of the systems used in the benchmark: two Jasper Forest processors, 2.13GHz GHz, 60W TDP, with Intel® 3420 chipset versus two Intel Xeon processors L5528, 2.13 GHz, 60 W TDP, with Intel® 5520 chipset
Lower Power, Higher Integration and Reduced Foot Print

Communications
Advanced TCA* 200W

Storage
Storage Bridge Bay 60W-200W

Military/Aerospace
Compact PCI 50-100W

Jasper Forest
Innovate and Integrate

- Based on Intel® Xeon® Microarchitecture, formally code named Nehalem
- Integrated PCIe* Gen 2.0 I/O in processor
- Less power consumption
- Crystal Beach Direct Memory Access (DMA)
- Non-Transparent PCI-E* Bridging (NTB)
- Hardware RAID acceleration
- High TCase for NEBs and other thermal certifications
- 7 Year Lifecycle, 10 Year Reliability
Integration

Intel® Xeon® 5500 Processor

Jasper Forest

Provides a 27 watt system power savings
Scalability

- Same Architecture
- 1 - 4 Cores: 23W - 85W
- One Common Socket

Intel® Microarchitecture (Nehalem) 45nm

Jasper Forest = Future Intel® Xeon® Processor for Embedded and Storage

- 48 to 85 watts
- 35 to 65 watts
- 23 to 30 watts
Summary

Jasper Forest Delivers Lower Power with Higher Integration
- Robust performance with a 27 watt system power savings
- I/O Hub Integration for real estate and power savings
- Workload consolidation
Non-Transparent Bridge (NTB) Benefits

- Enables failover for redundant systems (as shown above)
- Can connect two uni-processor systems and function as dual-processor
- Ability to connect to a non-IA system without a PCIe switch
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