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

Innovate

Integrate

Robust Performance
Lower System Power

27 WATT SAVINGS*

Integration for Savings

REAL ESTATE AND POWER

Workload Consolidation

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

Storage

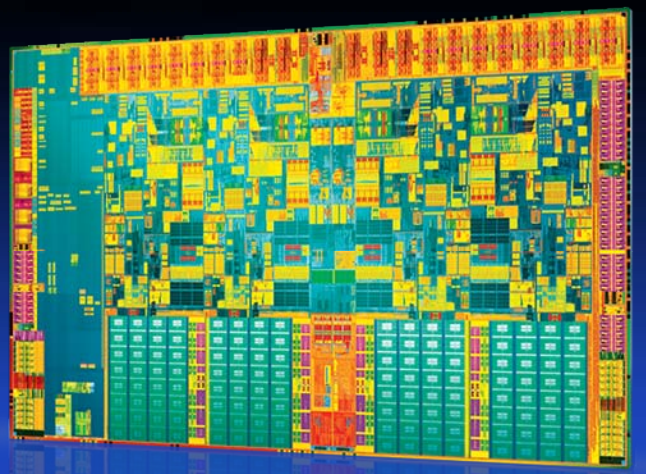
Military/Aerospace

Advanced TCA*
200W

Storage Bridge Bay
60W-200W

Compact PCI
50-100W

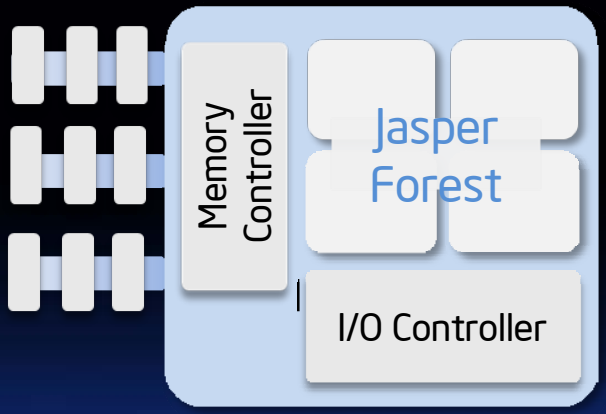
Jasper Forest



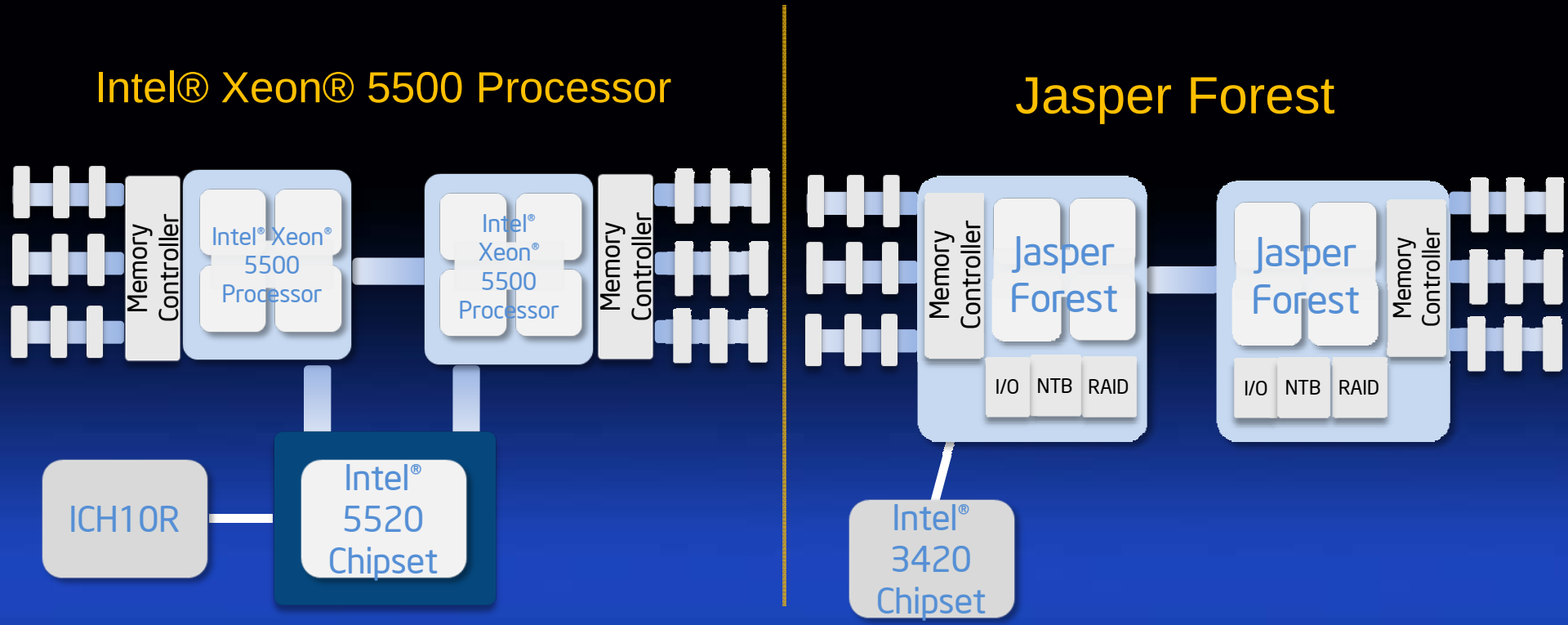
Feature Overview

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



Provides a 27 watt system power savings

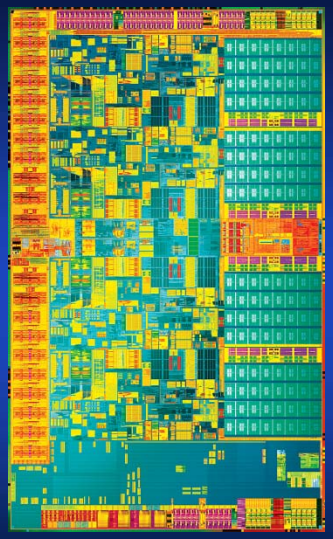
Scalability

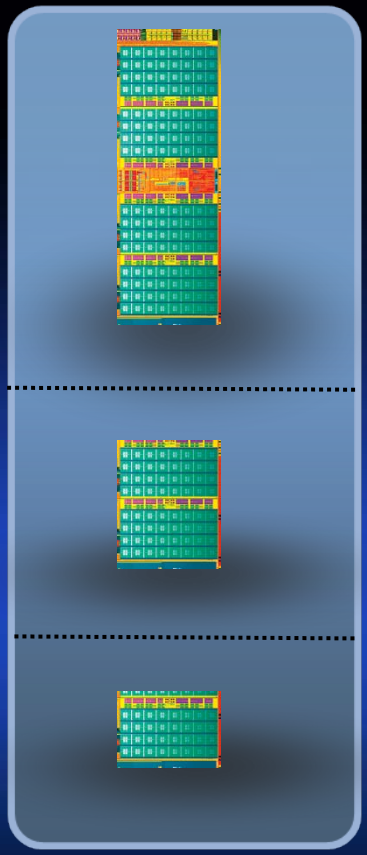
Same Architecture

1 – 4 Cores
23W – 85W

One Common Socket

Intel® Microarchitecture (Nehalem)
45nm





48 to 85 watts

35 to 65 watts

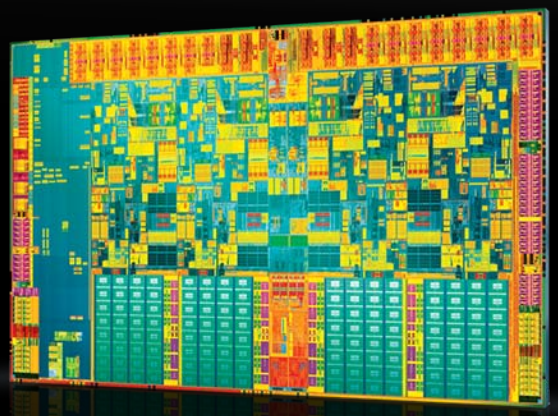
23 to 30 watts

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

Summary

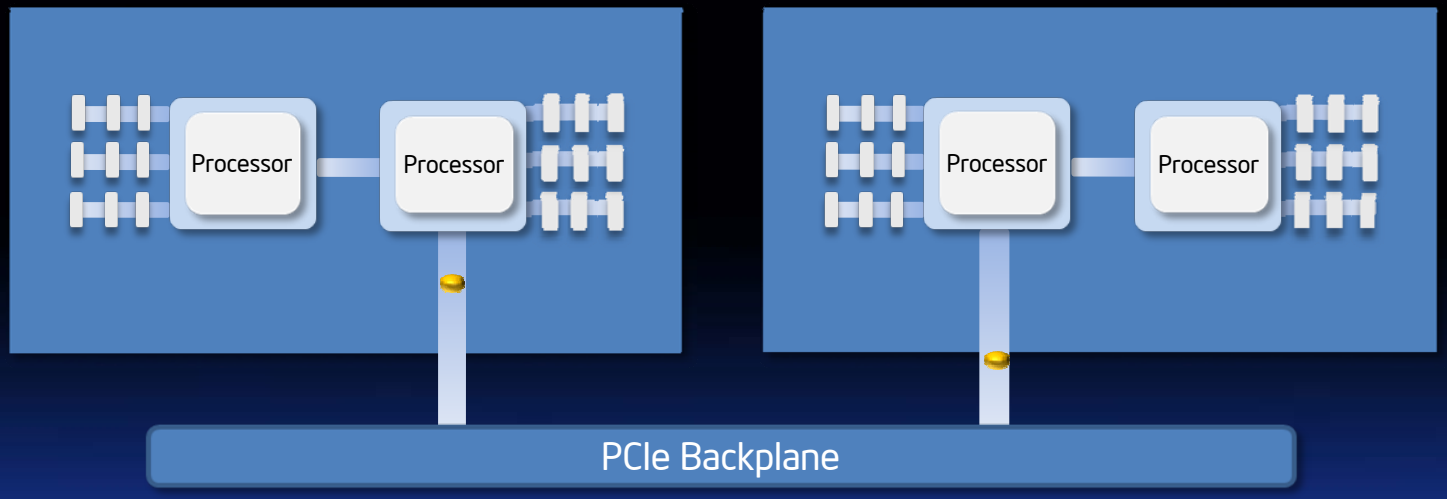
Jasper Forest Delivers Lower Power with Higher Integration

- Robust performance with a 27 watt system power savings
- I/O Hub Integration for real estate and power savings
- Workload consolidation



intel®

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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