Intel® Xeon Phi™ Coprocessor

Software Ecosystem and what’s to come
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Performance Notice
Outline

- Intel® Xeon Phi™ Coprocessor Software Architecture Components
- Intel® Xeon Phi™ Coprocessor Software Architecture Block View
- Intel® Xeon Phi™ Coprocessor Software Environment
- Application Dev Environment
- Future Spectrum of Programming Models
- Usage Scenarios
- Summary
Intel® Xeon Phi™ Coprocessor Software Architecture Block View

Symmetric, Scalable, Standards-based

PCI Express

Other System

HCA Driver

Other System

HCA Driver

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Usage Scenarios

Offload

Co-Processing Data Flows

OR

Co-Processing

Multi-Node Data Flows

Example
Summary

• Intel® Xeon Phi™ Coprocessor is a processor, not an accelerator
• System performance is a composition
• Intel® Xeon Phi™ Coprocessor is a thought leader for parallel IA
  – Same SW tools
  – High contrast
• Layered and compose-able SW model
  – Maximum flexibility
  – Maximum familiarity
  – Measured developer investment
    o Minimize re-training, porting and support costs
    o Exploit existing and familiar libraries and tools
    o Make use of familiar 3rd party tools and libraries

The Intel® Xeon Phi™ Coprocessor Software Model is the best possible investment in both Realized Return and Preservation
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Notice revision #20110804