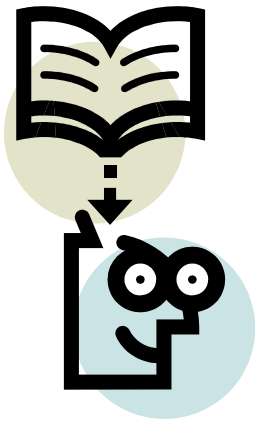
18-742
Lecture 26

Review

Spring 2005
Prof. Babak Falsafi
http://www.ece.cmu.edu/~ece742



Slides developed by Prof. Falsafi.

Announcements

Presentation:
- **11-3pm in HH 1112 on Friday**

Exam:
- **2:30-4:20 in class on Wednesday**

Coverage

Basic HW Distributed Shared Memory

- Centralized directories
- Distributed directories
- Memory consistency models

COMA

- Hierarchical COMA
- Flat COMA
- Simple COMA
- Reactive NUMA

Coverage (Cont.)

Other DSMs

- Self-invalidation
- Table-based sharing prediction
  - E.g., Upgrade prediction

Other DSMs

- Token Coherence
- Software DSM (TreadMarks)

Coverage (Cont.)

Interconnection networks

- **Topology, avg. Latency, B/W**
- **Routing: Circuit-switched, packet-switched**
- **Store-and-forward, Cut through, Wormhole**
- **Static vs. adaptive**
- **Deadlock-free routing**
- **Switch design**
- **Flow control**

Coverage (Cont.)

Chip Multiprocessing/Multithreading

- **Conventional threading**
- **Speculative threading**
- **Multithreaded cores**

In this course, to what degree have you...

- developed creative capacities (such as writing, inventing, designing, or performing in art, music, or drama, etc.).
- developed skills in expressing yourself orally (through class or group discussions, presentations, etc.).
- developed skills in expressing yourself in writing (through papers, essay exams, lab reports, poems, etc.).
- developed skills in interpreting or expressing concepts using visual or mathematical representations (graphs, pictures, 3-D models, flowcharts, tree diagrams, etc.).
- learned to find and use resources for answering questions or solving problems.

Rate each of the following resources or activities in terms of their usefulness to your learning in this course.

- Labs or Studios