Power and Performance Analysis of PDA Architectures

6.893 Advanced VLSI Computer Architecture
Fall 2000

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• Benchmarking
  – Common User Interface tasks
    • Task switching, window operations, handwriting recognition
  – JVM
  – Multimedia
    • MP3 audio, MPEG video
• Power Consumption Analysis
• Limits and Direction of Technology
Power and Performance Analysis of PDA Architectures

• Investigate various PDAs
  – Compaq Aero (MIPS), Compaq iPAQ (StrongArm), Casio Cassiopeia (MIPS), HP Jornada (SH3)

• Author benchmarks to be applied across PDAs
  – Windows CE applications

• Combine benchmark results with power analysis
  – Isolate code sequences which cause greatest power drain
  – Analyze CPU architecture and hypothesize cause
  – Identify possible technology weaknesses/limitations