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Configuration: config/all-4way 8
               Simulation Results
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Memory System:
     D Cache: Size = 8192, Associativity = 4, Block size = 32
     I Cache: Size = 8192, Associativity = 4, Block size = 32
     L2 Unified Cache: Size = 32768, Associativity = 4, Block size = 64
    Main Memory: Ready time = 30, Chunksize = 8, Chunktime = 15,
Execution Time = 24609052333, Total Traces Read = 10000000106
Flush time = 637828609
Total time (Execution Time + Flush Time) = 25246880942
Number of Reference Types: [Percentage]
    Reads = 2689845793
                                  [26.9%]
   Writes = 580065162
                                   [5.8%]
    Inst. = 6730089151
                                   [67.3%]
    Total = 10000000106
                               [Percentage]
Total Cycles for Activities:
    Reads = 8265930608
                                  [33.6%]
    Writes = 2456275324
                                   [10.0\%]
   Inst. = 13886846401
                                   [56.4%]
    Total = 24609052333
Average Cycles for Activities:
    Reads = 3.1, Writes = 4.2, Instructions = 3.7
Ideal: Execution Time = 16730089257; CPI = 2.5
Ideal Misaligned Execution Time = 21962901365; CPI = 3.3
Memory Level: L1 Instruction Cache
    Hit Count = 11158881443, Miss Count = 49195445
    Total Requests = 11208076888
    Hit Rate: 99.6%, Miss Rate = 0.4%
   Kickouts = 45049718, Dirty-kickouts = 0, Transfers = 49195445
    Flush Kickouts = 0
Memory Level: L1 Data Cache
    Hit Count = 3961063890,
                                Miss Count = 63671436
    Total Requests = 4024735326
   Hit Rate: 98.4%, Miss Rate = 1.6%

Kickouts = 41922031, Dirty-kickouts = 15036144, Transfers = 63671436
    Flush Kickouts = 2166638
Memory Level: L2 Cache
    Hit Count = 89742677, Miss Count = 40326986
    Total Requests = 130069663
   Hit Rate: 69.0%, Miss Rate = 31.0%

Kickouts = 24099935, Dirty-kickouts = 4617683, Transfers = 40326986
    Flush Kickouts = 3040765
System Costs:
     L1 Cache Costs (Instruction Cache $600 + Data Cache $600) = $1200
     L2 Cache Costs: $150
    Main Memory Costs: $75
     Total Memory Cost: $1425
Flushes = 26315, Invalidates = 22467628
```