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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 = 104264241349, Total Traces Read = 16506492546
Flush time = 1567032081
Total time (Execution Time + Flush Time) = 105831273430
Number of Reference Types: [Percentage]
   Reads = 3526260463
   Writes = 492653573
                                 [3.0%]
   Inst. = 12487578510
                                  [75.7%]
   Total = 16506492546
                              [Percentage]
Total Cycles for Activities:
   Reads = 86289908119
                                 [82.8%]
   Writes = 1193481798
                                 [1.1\%]
   Inst. = 16780851432
                                 [16.1\%]
   Total = 104264241349
Average Cycles for Activities:
   Reads = 24.5, Writes = 2.4, Instructions = 8.3
Ideal: Execution Time = 28994071056; CPI = 2.3
Ideal Misaligned Execution Time = 35948584560; CPI = 2.9
Memory Level: L1 Instruction Cache
   Hit Count = 16620434987, Miss Count = 954066
   Total Requests = 16621389053
   Hit Rate: 100.0%, Miss Rate = 0.0%
   Kickouts = 2551,
                       Dirty-kickouts = 0,
                                             Transfers = 954066
   Flush Kickouts = 0
Memory Level: L1 Data Cache
   Hit Count = 6262690702,
                               Miss Count = 576926295
   Total Requests = 6839616997
   Hit Rate: 91.6%, Miss Rate = 8.4%
   Kickouts = 332697758, Dirty-kickouts = 233108153, Transfers = 576926295
   Flush Kickouts = 4636485
Memory Level: L2 Cache
   Hit Count = 525309657, Miss Count = 290315342
   Total Requests = 815624999
   Hit Rate: 64.4%, Miss Rate = 35.6%
   Kickouts = 144373214, Dirty-kickouts = 123745728, Transfers = 290315342
   Flush Kickouts = 8577743
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 = 43438, Invalidates = 34267275
```