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Configuration: config/l1-small-4way 8
               Simulation Results
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Memory System:
    D Cache: Size = 4096, Associativity = 4, Block size = 32
    I Cache: Size = 4096, Associativity = 4, Block size = 32
    L2 Unified Cache: Size = 32768, Associativity = 1, Block size = 64
    Main Memory: Ready time = 30, Chunksize = 8, Chunktime = 15,
Execution Time = 104380982009, Total Traces Read = 16506492546
Flush time = 1618912397
Total time (Execution Time + Flush Time) = 105999894406
Number of Reference Types: [Percentage]
   Reads = 3526260463
                                 [21.4%]
   Writes = 492653573
                                 [3.0%]
   Inst. = 12487578510
                                  [75.7%]
   Total = 16506492546
                              [Percentage]
Total Cycles for Activities:
   Reads = 86371908298
                                 [82.7%]
   Writes = 1230007381
                                 [1.2\%]
   Inst. = 16779066330
                                 [16.1\%]
   Total = 104380982009
Average Cycles for Activities:
   Reads = 24.5, Writes = 2.5, Instructions = 8.4
Ideal: Execution Time = 28994071056; CPI = 2.3
Ideal Misaligned Execution Time = 35948584560; CPI = 2.9
Memory Level: L1 Instruction Cache
   Hit Count = 16620434085, Miss Count = 954968
   Total Requests = 16621389053
   Hit Rate: 100.0%, Miss Rate = 0.0%
   Kickouts = 5748,
                       Dirty-kickouts = 0,
                                             Transfers = 954968
   Flush Kickouts = 0
Memory Level: L1 Data Cache
   Hit Count = 6262672414,
                               Miss Count = 576944583
   Total Requests = 6839616997
   Hit Rate: 91.6%, Miss Rate = 8.4%
   Kickouts = 335943381, Dirty-kickouts = 235441010, Transfers = 576944583
   Flush Kickouts = 2304852
Memory Level: L2 Cache
   Hit Count = 525229903, Miss Count = 290415510
   Total Requests = 815645413
   Hit Rate: 64.4%, Miss Rate = 35.6%
                         Dirty-kickouts = 123421905, Transfers = 290415510
   Kickouts = 144937836,
   Flush Kickouts = 9507010
System Costs:
    L1 Cache Costs (Instruction Cache $300 + Data Cache $300) = $600
    L2 Cache Costs: $50
    Main Memory Costs: $75
    Total Memory Cost: $725
Flushes = 43438, Invalidates = 28564419
```