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Configuration: config/all-4way 32
              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 = 32,
                                                  Chunktime = 15,
Execution Time = 29755008086, Total Traces Read = 10000000109
Flush time = 345250108
Total time (Execution Time + Flush Time) = 30100258194
Number of Reference Types: [Percentage]
   Reads = 1907768017
                                [19.1\%]
   Writes = 727693598
                                 [7.3%]
   Inst. = 7364538494
                                 [73.6%]
   Total = 10000000109
                             [Percentage]
Total Cycles for Activities:
   Reads = 6348227252
                                [21.3%]
   Writes = 3802504328
                                 [12.8%]
   Inst. = 19604276506
                                 [65.9%]
   Total = 29755008086
Average Cycles for Activities:
   Reads = 3.3, Writes = 5.2, Instructions = 4.0
Ideal: Execution Time = 17364538603; CPI = 2.4
Ideal Misaligned Execution Time = 23214492795; CPI = 3.2
Memory Level: L1 Instruction Cache
   Hit Count = 12332139420, Miss Count = 220236372
   Total Requests = 12552375792
   Hit Rate: 98.2%, Miss Rate = 1.8%
   Kickouts = 213543772, Dirty-kickouts = 0, Transfers = 220236372
   Flush Kickouts = 0
Memory Level: L1 Data Cache
   Hit Count = 3199943661,
                              Miss Count = 97634848
   Total Requests = 3297578509
   Hit Rate: 97.0%, Miss Rate = 3.0%

Kickouts = 47750742, Dirty-kickouts = 43156900, Transfers = 97634848
   Flush Kickouts = 3306205
Memory Level: L2 Cache
   Hit Count = 274945451, Miss Count = 89388874
   Total Requests = 364334325
   Hit Rate: 75.5%, Miss Rate = 24.5%
                         Kickouts = 56622716,
   Flush Kickouts = 3310541
System Costs:
    L1 Cache Costs (Instruction Cache $600 + Data Cache $600) = $1200
    L2 Cache Costs: $150
    Main Memory Costs: $175
    Total Memory Cost: $1525
Flushes = 26315, Invalidates = 26653811
```