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Configuration: config/all-4way 64
              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 = 64,
                                                  Chunktime = 15,
Execution Time = 28136754626, Total Traces Read = 10000000109
Flush time = 283140208
Total time (Execution Time + Flush Time) = 28419894834
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 = 5800367072
                                [20.6%]
   Writes = 3428517713
                                 [12.2%]
   Inst. = 18907869841
                                 [67.2%]
   Total = 28136754626
Average Cycles for Activities:
   Reads = 3.0, Writes = 4.7, Instructions = 3.8
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: $275
    Total Memory Cost: $1625
Flushes = 26315, Invalidates = 26653811
```