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Configuration: config/all-2way 16
               Simulation Results
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Memory System:
    D Cache: Size = 8192, Associativity = 2, Block size = 32
    I Cache: Size = 8192, Associativity = 2, Block size = 32
    L2 Unified Cache: Size = 32768, Associativity = 2, Block size = 64
    Main Memory: Ready time = 30, Chunksize = 16,
                                                   Chunktime = 15,
Execution Time = 35760497600, Total Traces Read = 10000000109
Flush time = 579069642
Total time (Execution Time + Flush Time) = 36339567242
Number of Reference Types: [Percentage]
   Reads = 1907768017
                                 [19.1\%]
   Writes = 727693598
                                  [7.3%]
   Inst. = 7364538494
                                  [73.6%]
   Total = 10000000109
                              [Percentage]
Total Cycles for Activities:
                                [22.9%]
   Reads = 8197772364
   Writes = 5228092339
                                  [14.6%]
   Inst. = 22334632897
                                  [62.5%]
   Total = 35760497600
Average Cycles for Activities:
   Reads = 4.3, Writes = 7.2, Instructions = 4.9
Ideal: Execution Time = 17364538603; CPI = 2.4
Ideal Misaligned Execution Time = 23214492795; CPI = 3.2
Memory Level: L1 Instruction Cache
   Hit Count = 12328417929, Miss Count = 223957863
   Total Requests = 12552375792
   Hit Rate: 98.2%, Miss Rate = 1.8%
   Kickouts = 217282337, Dirty-kickouts = 0, Transfers = 223957863
   Flush Kickouts = 0
Memory Level: L1 Data Cache
   Hit Count = 3175293706,
                               Miss Count = 122284803
   Total Requests = 3297578509
   Hit Rate: 96.3%, Miss Rate = 3.7%

Kickouts = 62676901, Dirty-kickouts = 52965730, Transfers = 122284803
   Flush Kickouts = 3039609
Memory Level: L2 Cache
   Hit Count = 295187405, Miss Count = 107060600
   Total Requests = 402248005
   Hit Rate: 73.4%, Miss Rate = 26.6%
Kickouts = 71369925, Dirty-kickouts
                          Flush Kickouts = 3798448
System Costs:
    L1 Cache Costs (Instruction Cache $400 + Data Cache $400) = $800
    L2 Cache Costs: $100
    Main Memory Costs: $75
    Total Memory Cost: $975
Flushes = 26315, Invalidates = 26103182
```