```
Configuration: config/l2-4way 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 = 4, Block size = 64
    Main Memory: Ready time = 30, Chunksize = 16,
                                                    Chunktime = 15,
Execution Time = 33802613726, Total Traces Read = 10000000109
Flush time = 597113242
Total time (Execution Time + Flush Time) = 34399726968
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 = 7755711949
                                   [14.2\%]
    Writes = 4785163933
   Inst. = 21261737844
                                   [62.9%]
    Total = 33802613726
Average Cycles for Activities:
    Reads = 4.1, Writes = 6.6, Instructions = 4.6
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 = 310907387, Miss Count = 91340618
    Total Requests = 402248005
   Hit Rate: 77.3%, Miss Rate = 22.7%
Kickouts = 57759818, Dirty-kickouts
                          Dirty-kickouts = 20369996, Transfers = 91340618
    Flush Kickouts = 3978884
System Costs:
     L1 Cache Costs (Instruction Cache $400 + Data Cache $400) = $800
     L2 Cache Costs: $150
    Main Memory Costs: $75
     Total Memory Cost: $1025
Flushes = 26315, Invalidates = 26527488
```