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Configuration: config/l1-8way 16
               Simulation Results
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Memory System:
    D Cache: Size = 8192, Associativity = 8, Block size = 32
     I Cache: Size = 8192, Associativity = 8, Block size = 32
    L2 Unified Cache: Size = 32768, Associativity = 1, Block size = 64
    Main Memory: Ready time = 30, Chunksize = 16,
                                                    Chunktime = 15,
Execution Time = 35318158251, Total Traces Read = 10000000109
Flush time = 356480518
Total time (Execution Time + Flush Time) = 35674638769
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 = 7653847468
                                 [21.7%]
                                  [13.4%]
    Writes = 4716925661
   Inst. = 22947385122
                                  [65.0%]
    Total = 35318158251
Average Cycles for Activities:
    Reads = 4.0, Writes = 6.5, Instructions = 4.8
Ideal: Execution Time = 17364538603; CPI = 2.4
Ideal Misaligned Execution Time = 23214492795; CPI = 3.2
Memory Level: L1 Instruction Cache
   Hit Count = 12325046810, Miss Count = 227328982
    Total Requests = 12552375792
    Hit Rate: 98.2%, Miss Rate = 1.8%
    Kickouts = 220636066, Dirty-kickouts = 0, Transfers = 227328982
    Flush Kickouts = 0
Memory Level: L1 Data Cache
   Hit Count = 3214036349,
                               Miss Count = 83542160
    Total Requests = 3297578509
   Hit Rate: 97.5%, Miss Rate = 2.5%

Kickouts = 39073920, Dirty-kickouts = 37731873, Transfers = 83542160
    Flush Kickouts = 3374743
Memory Level: L2 Cache
    Hit Count = 240078550, Miss Count = 111899208
    Total Requests = 351977758
   Hit Rate: 68.2%, Miss Rate = 31.8%

Kickouts = 80178992, Dirty-kickouts = 20058088, Transfers = 111899208
    Flush Kickouts = 2608082
System Costs:
     L1 Cache Costs (Instruction Cache $800 + Data Cache $800) = $1600
    L2 Cache Costs: $50
    Main Memory Costs: $75
    Total Memory Cost: $1725
Flushes = 26315, Invalidates = 25090467
```