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Configuration: config/l1-small 8
               Simulation Results
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Memory System:
    D Cache: Size = 4096, Associativity = 1, Block size = 32
     I Cache: Size = 4096, Associativity = 1, Block size = 32
    L2 Unified Cache: Size = 32768, Associativity = 1, Block size = 64
    Main Memory: Ready time = 30, Chunksize = 8, Chunktime = 15,
Execution Time = 38023918897, Total Traces Read = 10000000106
Flush time = 597639819
Total time (Execution Time + Flush Time) = 38621558716
Number of Reference Types: [Percentage]
   Reads = 2689845793
                                  [26.9%]
   Writes = 580065162
                                  [5.8%]
   Inst. = 6730089151
                                  [67.3%]
   Total = 10000000106
                              [Percentage]
Total Cycles for Activities:
   Reads = 16800298746
                                [44.2%]
   Writes = 4443482687
                                  [11.7\%]
   Inst. = 16780137464
                                  [44.1%]
   Total = 38023918897
Average Cycles for Activities:
   Reads = 6.2, Writes = 7.7, Instructions = 5.6
Ideal: Execution Time = 16730089257; CPI = 2.5
Ideal Misaligned Execution Time = 21962901365; CPI = 3.3
Memory Level: L1 Instruction Cache
   Hit Count = 11121715002, Miss Count = 86361886
   Total Requests = 11208076888
   Hit Rate: 99.2%, Miss Rate = 0.8%
   Kickouts = 84111191, Dirty-kickouts = 0, Transfers = 86361886
   Flush Kickouts = 0
Memory Level: L1 Data Cache
   Hit Count = 3767359167,
                               Miss Count = 257376159
   Total Requests = 4024735326
   Hit Rate: 93.6%, Miss Rate = 6.4%
   Kickouts = 188261440, Dirty-kickouts = 65752071, Transfers = 257376159
   Flush Kickouts = 976157
Memory Level: L2 Cache
   Hit Count = 326120427, Miss Count = 84345846
   Total Requests = 410466273
   Hit Rate: 79.5%, Miss Rate = 20.5%

Kickouts = 59461731, Dirty-kickouts = 14673729, Transfers = 84345846
   Flush Kickouts = 2954283
System Costs:
     L1 Cache Costs (Instruction Cache $100 + Data Cache $100) = $200
    L2 Cache Costs: $50
    Main Memory Costs: $75
    Total Memory Cost: $325
Flushes = 26315, Invalidates = 15823222
```