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Configuration: config/l1-small-4way 8
              Simulation Results
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Memory System:
    D Cache: Size = 4096, Associativity = 4, Block size = 32
    I Cache: Size = 4096, Associativity = 4, Block size = 32
    L2 Unified Cache: Size = 32768, Associativity = 1, Block size = 64
    Main Memory: Ready time = 30, Chunksize = 8, Chunktime = 15,
Execution Time = 57472452939, Total Traces Read = 10000000109
Flush time = 564176424
Total time (Execution Time + Flush Time) = 58036629363
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 = 16686142616
                                [29.0%]
   Writes = 7386893801
                                 [12.9\%]
   Inst. = 33399416522
                                 [58.1\%]
   Total = 57472452939
Average Cycles for Activities:
   Reads = 8.7, Writes = 10.2, Instructions = 7.8
Ideal: Execution Time = 17364538603; CPI = 2.4
Ideal Misaligned Execution Time = 23214492795; CPI = 3.2
Memory Level: L1 Instruction Cache
   Hit Count = 12210284847, Miss Count = 342090945
   Total Requests = 12552375792
   Hit Rate: 97.3%, Miss Rate = 2.7%
   Kickouts = 338744116, Dirty-kickouts = 0, Transfers = 342090945
   Flush Kickouts = 0
Memory Level: L1 Data Cache
   Hit Count = 3121536340,
                              Miss Count = 176042169
   Total Requests = 3297578509
   Hit Rate: 94.7%, Miss Rate = 5.3%
   Kickouts = 103231082, Dirty-kickouts = 69442645, Transfers = 176042169
   Flush Kickouts = 1564889
Memory Level: L2 Cache
   Hit Count = 424517644, Miss Count = 164623004
   Total Requests = 589140648
   Hit Rate: 72.1%, Miss Rate = 27.9%
   Kickouts = 122466714, Dirty-kickouts = 30495303, Transfers = 164623004
   Flush Kickouts = 2946523
System Costs:
    L1 Cache Costs (Instruction Cache $300 + Data Cache $300) = $600
    L2 Cache Costs: $50
    Main Memory Costs: $75
    Total Memory Cost: $725
Flushes = 26315, Invalidates = 18375570
```