```
Configuration: config/all-fa 8
              Simulation Results
-----
Memory System:
    D Cache: Size = 8192, Associativity = 256, Block size = 32
    I Cache: Size = 8192, Associativity = 256,
                                               Block size = 32
    L2 Unified Cache: Size = 32768, Associativity = 512, Block size = 64
    Main Memory: Ready time = 30, Chunksize = 8, Chunktime = 15,
Execution Time = 104212820561, Total Traces Read = 16506492546
Flush time = 1379388532
Total time (Execution Time + Flush Time) = 105592209093
Number of Reference Types: [Percentage]
   Reads = 3526260463
                                 [21.4%]
   Writes = 492653573
                                 [3.0%]
   Inst. = 12487578510
                                  [75.7%]
   Total = 16506492546
                              [Percentage]
Total Cycles for Activities:
   Reads = 86238407263
                                 [82.8%]
   Writes = 1193593885
                                 [1.1\%]
   Inst. = 16780819413
                                 [16.1\%]
   Total = 104212820561
Average Cycles for Activities:
   Reads = 24.5, Writes = 2.4, Instructions = 8.3
Ideal: Execution Time = 28994071056; CPI = 2.3
Ideal Misaligned Execution Time = 35948584560; CPI = 2.9
Memory Level: L1 Instruction Cache
   Hit Count = 16620435112, Miss Count = 953941
   Total Requests = 16621389053
   Hit Rate: 100.0%, Miss Rate = 0.0%
   Kickouts = 2003,
                       Dirty-kickouts = 0,
                                             Transfers = 953941
   Flush Kickouts = 0
Memory Level: L1 Data Cache
   Hit Count = 6262690810,
                               Miss Count = 576926187
   Total Requests = 6839616997
   Hit Rate: 91.6%, Miss Rate = 8.4%
   Kickouts = 332698276, Dirty-kickouts = 233107527, Transfers = 576926187
   Flush Kickouts = 4636927
Memory Level: L2 Cache
   Hit Count = 526034487, Miss Count = 289590095
   Total Requests = 815624582
   Hit Rate: 64.5%, Miss Rate = 35.5%
   Kickouts = 144551150, Dirty-kickouts = 122845198, Transfers = 289590095
   Flush Kickouts = 8157637
System Costs:
    L1 Cache Costs (Instruction Cache $1800 + Data Cache $1800) = $3600
    L2 Cache Costs: $500
    Main Memory Costs: $75
    Total Memory Cost: $4175
Flushes = 43438, Invalidates = 34265045
```