```
--------------------------------------------------------------------------------
      astar-L1d-small     Simulation Results
--------------------------------------------------------------------------------

Number of reference types:
  Number of reads   =  2549106849  [25.49%]
  Number of writes  =   626305991  [6.26%]
  Number of inst    =  6824587160  [68.25%]
  Total             =  10000000000

Total cycles for all activities:
  Cycles for reads  =  33323479668  [58.95%]
  Cycles for writes =  11712805234  [20.72%]
  Cycles for inst   =  11490462399  [20.33%]
  Total time        =  56526747301

Average cycles per activity:
  Read  = 13.07
  Write = 18.70
  Inst  = 1.68
Ideal: Exec. Time = 16824587160; CPI = 2.47
Ideal mis-aligned: Exec. Time = 23929686467; CPI = 3.51

Memory level: L1i
  Hits   =  11393011748  [99.99%]
  Misses =     1303125  [0.01%]
  Total  =  11394314873
  Kickouts = 1302869, Dirty kickouts = 0, Transfers = 1303125

Memory level: L1d
  Hits   =  4001371773  [89.75%]
  Misses =   456800679  [10.25%]
  Total  =  4458172452
  Kickouts = 456800551, Dirty kickouts = 179643008, Transfers = 456800679

Memory level: L2
  Hits   =   501306381  [78.61%]
  Misses =   136440431  [21.39%]
  Total  =   637746812
  Kickouts = 136439919, Dirty kickouts = 65580547, Transfers = 136440431

Cost analysis:
  L1i cache cost = $200
  L1d cache cost = $100
  L2  cache cost = $50
  Memory cost    = $75
  Total cost     = $425
```