```
    ------------------------------------------------------------------------
         bzip2-L1-2way      Simulation Results
    ------------------------------------------------------------------------


Number of reference types:
  Number of reads   =  1874397115  [18.74%]
  Number of writes  =   567216161  [5.67%]
  Number of inst    =  7558386724  [75.58%]
  Total             = 10000000000

Total cycles for all activities:
  Cycles for reads  = 20290282521  [39.02%]
  Cycles for writes = 19745481896  [37.97%]
  Cycles for inst   = 11967529611  [23.01%]
  Total time        = 52003294028

Average cycles per activity:
  Read  = 10.82
  Write = 34.81
  Inst  = 1.58
Ideal: Exec. Time = 17558386724; CPI = 2.32
Ideal mis-aligned: Exec. Time = 23201139335; CPI = 3.07

Memory level: L1i
  Hits   = 11966585724  [100.00%]
  Misses =        7229  [0.00%]
  Total  = 11966592953
  Kickouts = 6973, Dirty kickouts = 0, Transfers = 7229

Memory level: L1d
  Hits   = 2376682331  [93.51%]
  Misses =  165045005  [6.49%]
  Total  = 2541727336
  Kickouts = 165044749, Dirty kickouts = 70704191, Transfers = 165045005

Memory level: L2
  Hits   =   72343025  [30.69%]
  Misses =  163413400  [69.31%]
  Total  =  235756425
  Kickouts = 163412888, Dirty kickouts = 65263422, Transfers = 163413400

Cost analysis:
  L1i cache cost = $400
  L1d cache cost = $400
  L2  cache cost = $50
  Memory cost    = $75
  Total cost     = $925
```