```
-------------------------------------------------------------------------
      bzip2-L2-4way     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  =  19218012465  [38.90%]
  Cycles for writes =  18215958176  [36.87%]
  Cycles for inst   =  11967539859  [24.23%]
  Total time        =  49401510500

Average cycles per activity:
  Read  = 10.25
  Write = 32.11
  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   =    88469976  [37.53%]
  Misses =   147286449  [62.47%]
  Total  =   235756425
  Kickouts = 147285937, Dirty kickouts = 63727745, Transfers = 147286449

Cost analysis:
  L1i cache cost = $400
  L1d cache cost = $400
  L2  cache cost = $150
  Memory cost    = $75
  Total cost     = $1025
```