```
--------------------------------------------------------------------------
       bzip2-All-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  =  19599702681  [38.81%]
  Cycles for writes =  18932327356  [37.49%]
  Cycles for inst   =  11967527423  [23.70%]
  Total time        =  50499557460


Average cycles per activity:
  Read  = 10.46
  Write = 33.38
  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   =   81592046  [34.61%]
  Misses =  154164379  [65.39%]
  Total  =  235756425
  Kickouts = 154163867, Dirty kickouts = 64299983, Transfers = 154164379


Cost analysis:
  L1i cache cost = $400
  L1d cache cost = $400
  L2  cache cost = $100
  Memory cost    = $75
  Total cost     = $975
```