```
    mst ht:4000; lookahead:20; stride:10; 2 cores * 2 threads/core; L1I:32KB,2-way;

L2:32KB,2-way; L2:96KB,4-way,LRU //l2assoc: 2, l2size: 96
    llc.numMTLLCHits=24830918
   llc.numMTLLCMisses=21785202
   llc.numTotalHTLLCRequests=26078656
   llc.numUsefulHTLLCRequests=24256408
   llc.numRedundantHitToTransientTagHTLLCRequests=41439
   llc.numRedundantHitToCacheHTLLCReguests=549152
   llc.numTimelyHTLLCRequests=24158507
   llc.numLateHTLLCRequests=97901
   llc.numBadHTLLCRequests=2730
   llc.numUqlyHTLLCRequests=230286
   llc.htLLCRequestAccuracy=93.01249266833383%
   llc.htLLCRequestCoverage=52.68366592740784%

    mst ht:4000; lookahead:20; stride:10; 2 cores * 2 threads/core; L1I:32KB,4-way;

L2:32KB, 4-way; L2:96KB, 8-way, LRU //l2assoc: 2->4
   llc.numMTLLCHits=25808589
   llc.numMTLLCMisses=20518602
   llc.numTotalHTLLCRequests=25943909
   llc.numUsefulHTLLCRequests=25261398
   llc.numRedundantHitToTransientTagHTLLCRequests=20611
   llc.numRedundantHitToCacheHTLLCRequests=518831
   llc.numTimelyHTLLCRequests=24705780
   llc.numLateHTLLCRequests=555618
   llc.numBadHTLLCRequests=889
   llc.numUqlyHTLLCRequests=54911
   llc.htLLCRequestAccuracy=97.36928232364676%
   llc.htLLCRequestCoverage=55.1799868938401%
3. mst_ht:4000; lookahead:20; stride:10; 2 cores * 2 threads/core; L1I:32KB,4-way;
L2:32KB,4-way; L2:128KB,4-way,LRU //l2size: 96->128
    llc.numMTLLCHits=9404098
   llc.numMTLLCMisses=7770942
   llc.numTotalHTLLCRequests=9611314
   llc.numUsefulHTLLCRequests=9222956
   llc.numRedundantHitToTransientTagHTLLCReguests=20763
   llc.numRedundantHitToCacheHTLLCRequests=180375
   llc.numTimelyHTLLCRequests=9181462
   llc.numLateHTLLCRequests=41494
   llc.numBadHTLLCRequests=7370
   llc.numUglyHTLLCRequests=161630
   llc.htLLCRequestAccuracy=95.95936622193386%
   llc.htLLCRequestCoverage=54.27216286693024%
4. mst ht:4000; lookahead:20; stride:10; 2 cores * 2 threads/core; L1I:32KB,4-way;
L2:32KB,4-way; L2:128KB,8-way,LRU //l2assoc: 4->8
    llc.numMTLLCHits=25692904
   llc.numMTLLCMisses=20450472
   llc.numTotalHTLLCRequests=25731153
   llc.numUsefulHTLLCRequests=25146212
   llc.numRedundantHitToTransientTagHTLLCRequests=7885
   llc.numRedundantHitToCacheHTLLCRequests=501685
   llc.numTimelyHTLLCRequests=24826029
   llc.numLateHTLLCRequests=320183
   llc.numBadHTLLCRequests=101
   llc.numUglyHTLLCRequests=646
   llc.htLLCRequestAccuracy=97.72672060206553%
   llc.htLLCRequestCoverage=55.149212166393504%
5. mst ht:4000; lookahead:20; stride:10; 2 cores * 2 threads/core; L1I:32KB,4-way;
L2:32KB,4-way; L2:256KB,4-way,LRU //l2size: 128->256
    llc.numMTLLCHits=9552131
```

```
llc.numMTLLCMisses=7515609
   llc.numTotalHTLLCRequests=9583481
   llc.numUsefulHTLLCRequests=9376909
   llc.numRedundantHitToTransientTagHTLLCRequests=4344
   llc.numRedundantHitToCacheHTLLCRequests=171896
   llc.numGoodHTLLCRequests=9376909
   llc.numBadHTLLCRequests=83
   llc.numUqlyHTLLCRequests=3724
   llc.numLateHTLLCRequests=245646
   llc.htLLCRequestAccuracy=97.84449930041077%
   llc.htLLCRequestCoverage=55.50924379657313%
6. mst ht:4000; lookahead:20; stride:10; 2 cores * 2 threads/core; L1I:32KB,4-way;
L2:32KB,4-way; L2:256KB,8-way,LRU //l2assoc: 4->8
    llc.numMTLLCHits=25704565
   llc.numMTLLCMisses=20431266
   llc.numTotalHTLLCRequests=25742392
   llc.numUsefulHTLLCRequests=25157835
   llc.numRedundantHitToTransientTagHTLLCRequests=7901
   llc.numRedundantHitToCacheHTLLCRequests=500754
   llc.numTimelyHTLLCRequests=24808543
   llc.numLateHTLLCRequests=349292
   llc.numBadHTLLCRequests=9
   llc.numUqlyHTLLCRequests=129
   llc.htLLCRequestAccuracy=97.72920480738541%
   llc.htLLCRequestCoverage=55.18388046300803%
7. mst ht:4000; lookahead:20; stride:10; 2 cores * 2 threads/core; L1I:32KB,4-way;
L2:32KB,4-way; L2:512KB,4-way,LRU //l2size: 256->512
    llc.numMTLLCHits=9546778
   llc.numMTLLCMisses=7500637
   llc.numTotalHTLLCRequests=9567763
   llc.numUsefulHTLLCRequests=9371544
   llc.numRedundantHitToTransientTagHTLLCRequests=3322
   llc.numRedundantHitToCacheHTLLCRequests=165719
   llc.numGoodHTLLCRequests=9371544
   llc.numBadHTLLCRequests=0
   llc.numUglyHTLLCRequests=78
   llc.numLateHTLLCRequests=240935
   llc.htLLCRequestAccuracy=97.94916533781199%
   llc.htLLCRequestCoverage=55.54435434280844%
8. mst ht:4000; lookahead:20; stride:10; 2 cores * 2 threads/core; L1I:32KB,4-way;
L2:32KB,4-way; L2:1024KB,4-way,LRU //l2size: 512->1024
    llc.numMTLLCHits=9547153
   llc.numMTLLCMisses=7500136
   llc.numTotalHTLLCRequests=9568417
   llc.numUsefulHTLLCRequests=9371940
   llc.numRedundantHitToTransientTagHTLLCRequests=3253
   llc.numRedundantHitToCacheHTLLCRequests=165586
   llc.numGoodHTLLCRequests=9371940
   llc.numBadHTLLCRequests=0
   llc.numUglyHTLLCRequests=72
   llc.numLateHTLLCRequests=242083
   llc.htLLCRequestAccuracy=97.9466091413031%
   llc.htLLCRequestCoverage=55.54704708537349%
9. mst ht:4000; lookahead:20; stride:10; 2 cores * 2 threads/core; L1I:32KB,8-way;
L2:32KB,8-way; L2:128KB,16-way,LRU //l2assoc: 4->16
    llc.numMTLLCHits=25793549
    llc.numMTLLCMisses=20347445
```

```
llc.numTotalHTLLCRequests=25763628
   llc.numUsefulHTLLCRequests=25249275
   llc.numRedundantHitToTransientTagHTLLCRequests=10995
   llc.numRedundantHitToCacheHTLLCRequests=499603
   llc.numTimelyHTLLCRequests=24783074
   llc.numLateHTLLCRequests=466201
   llc.numBadHTLLCRequests=0
   llc.numUqlyHTLLCRequests=54
   llc.htLLCRequestAccuracy=98.00356921781358%
   llc.htLLCRequestCoverage=55.37520023370102%
10. mst ht:4000; lookahead:640; stride:320; 2 cores * 2 threads/core; L1I:32KB,2-w
ay; L2:32KB,2-way; L2:96KB,4-way,LRU //lookahead: 640, stride: 320, l2assoc: 2
    llc.numMTLLCHits=3230525
   llc.numMTLLCMisses=44786935
   llc.numTotalHTLLCRequests=34466590
   llc.numUsefulHTLLCRequests=1511210
   llc.numRedundantHitToTransientTagHTLLCRequests=108559
   llc.numRedundantHitToCacheHTLLCRequests=1555285
   llc.numTimelyHTLLCRequests=1494595
   llc.numLateHTLLCRequests=16615
   llc.numBadHTLLCRequests=129759
   llc.numUglyHTLLCRequests=5288648
   llc.htLLCRequestAccuracy=4.384564878625939%
   llc.htLLCRequestCoverage=3.2640832586273163%
11. mst ht:4000; lookahead:640; stride:320; 2 cores * 2 threads/core; L1I:32KB,4-w
ay; L2:32KB,4-way; L2:96KB,8-way,LRU //l2assoc: 2->4
   llc.numMTLLCHits=3972039
   llc.numMTLLCMisses=43656103
   llc.numTotalHTLLCRequests=33765716
   llc.numUsefulHTLLCRequests=2262120
   llc.numRedundantHitToTransientTagHTLLCRequests=6521
   llc.numRedundantHitToCacheHTLLCRequests=1611693
   llc.numTimelyHTLLCRequests=2255696
   llc.numLateHTLLCRequests=6424
   llc.numBadHTLLCRequests=21896
   llc.numUglyHTLLCRequests=720854
   llc.htLLCRequestAccuracy=6.699458113075405%
```

llc.htLLCRequestCoverage=4.926410153110672%