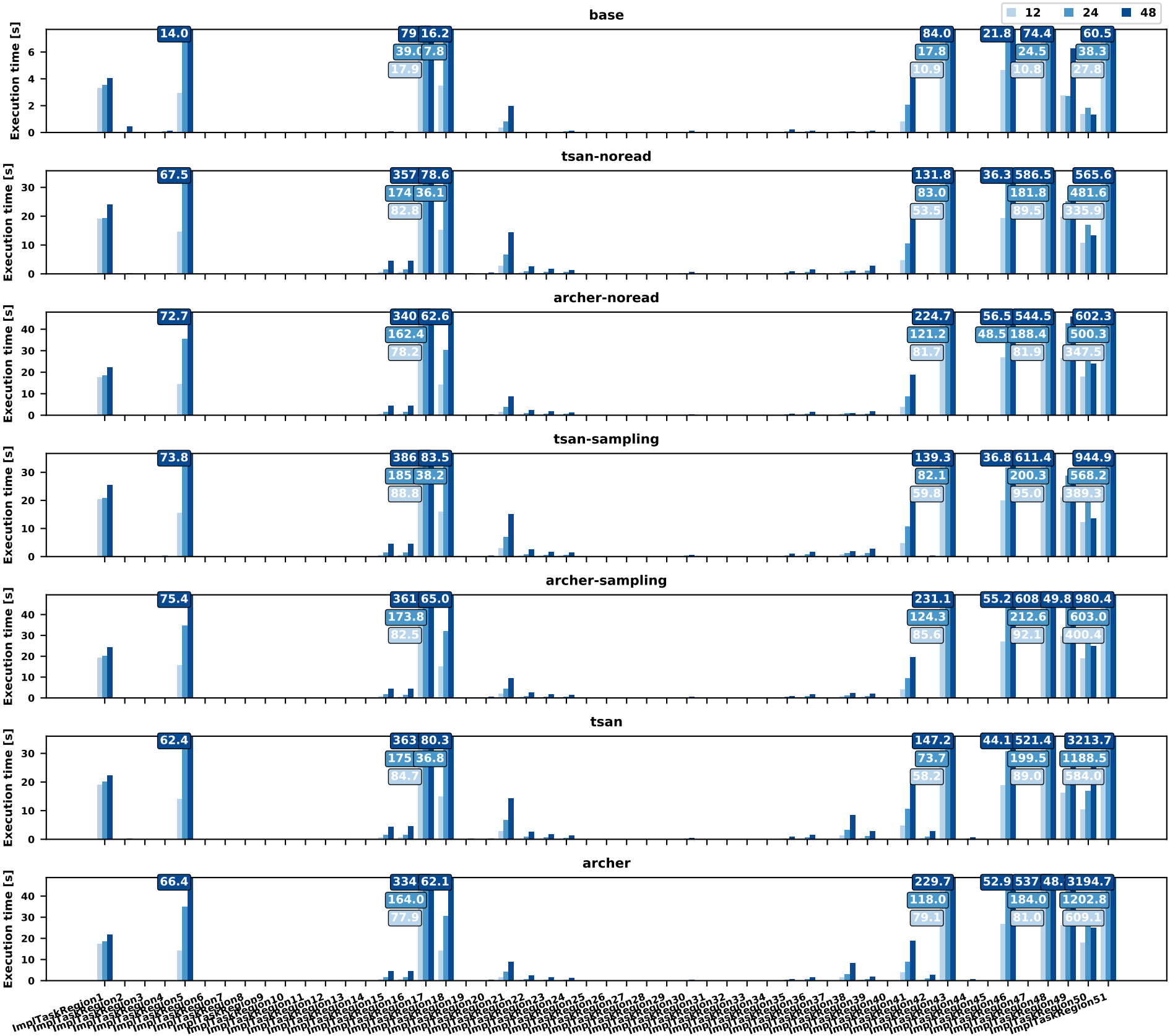
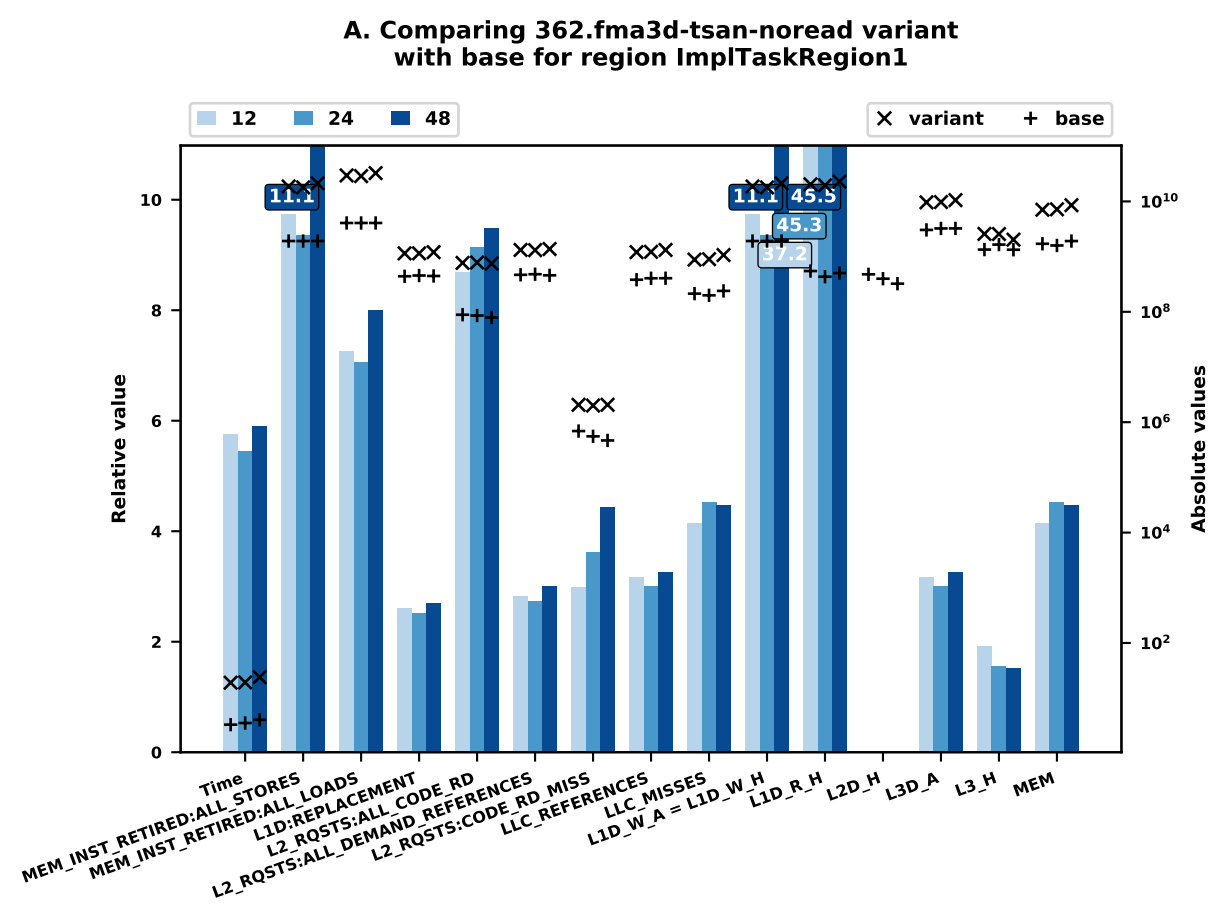
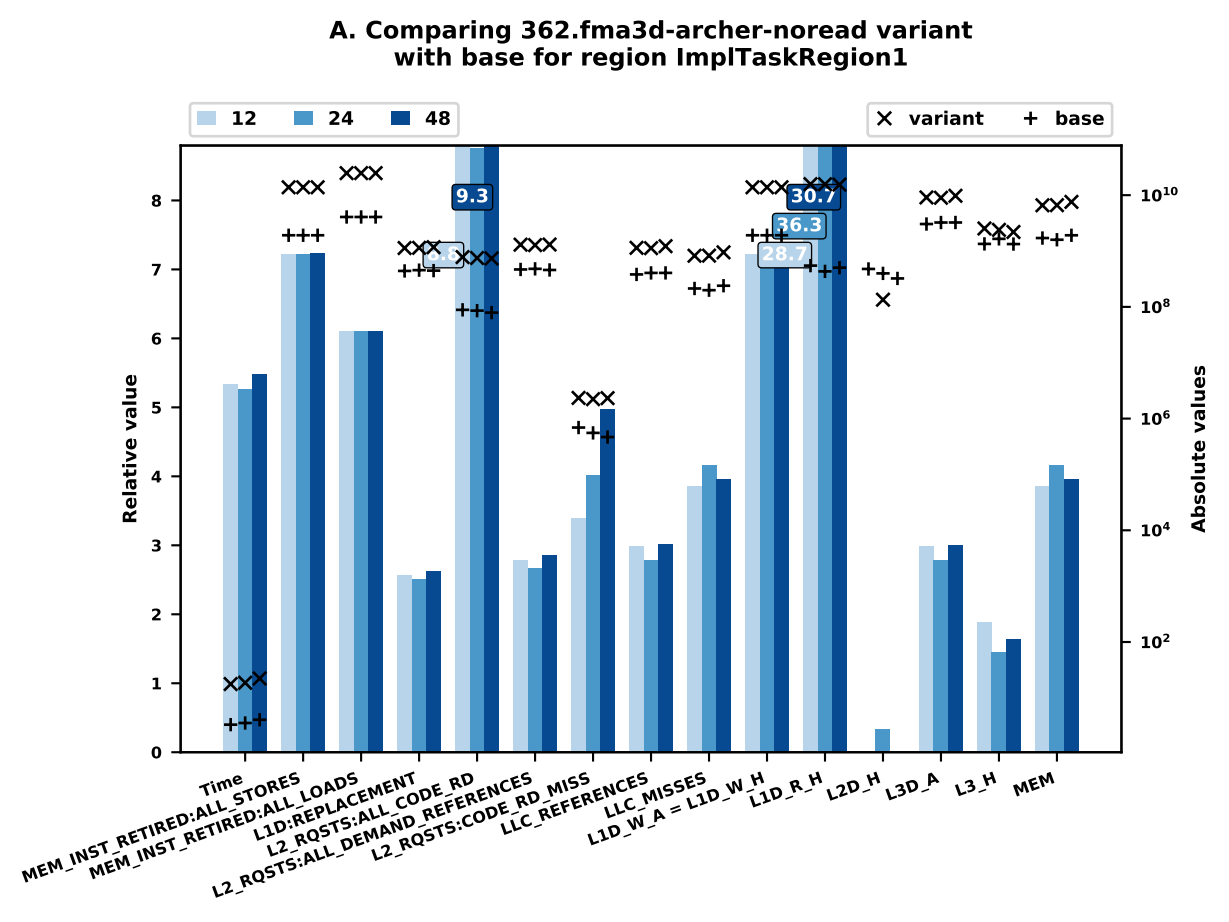
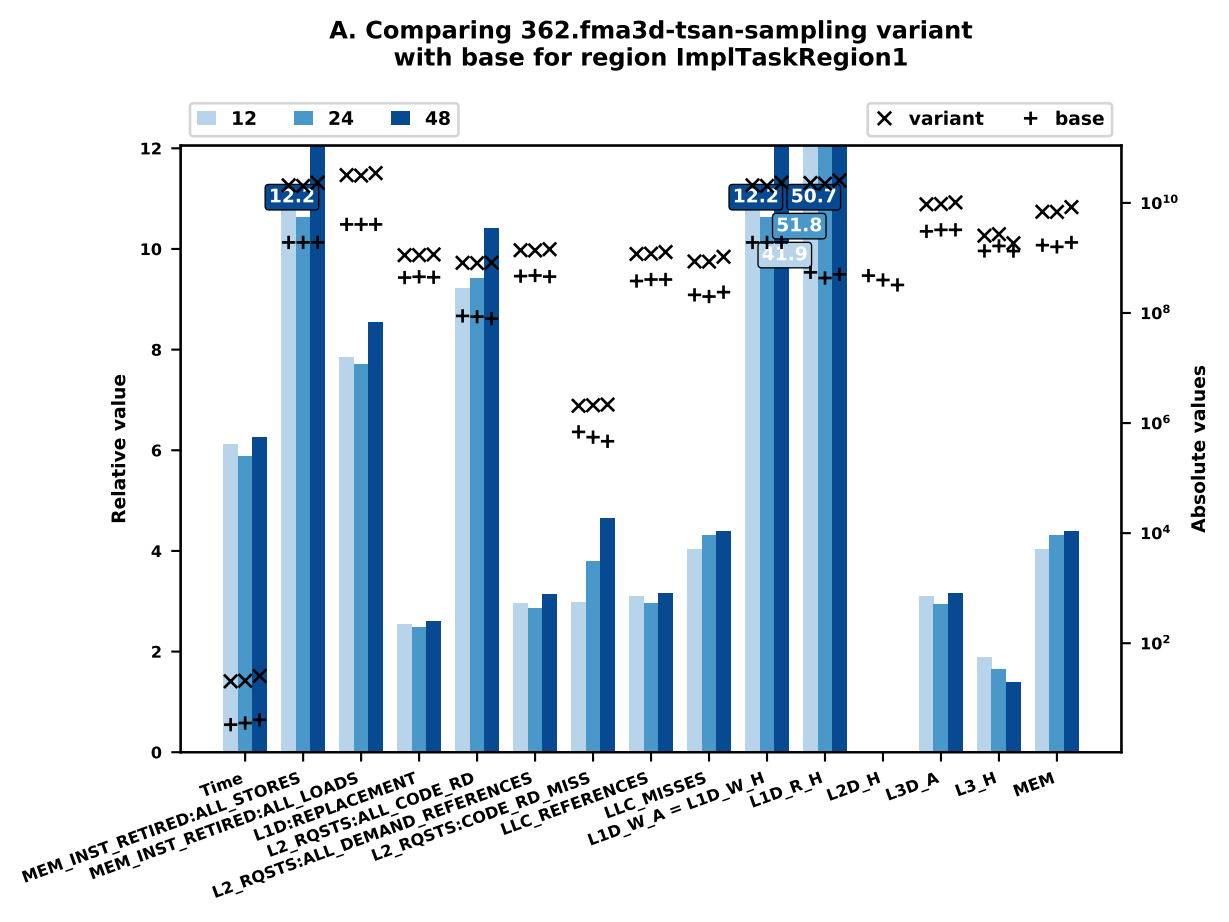
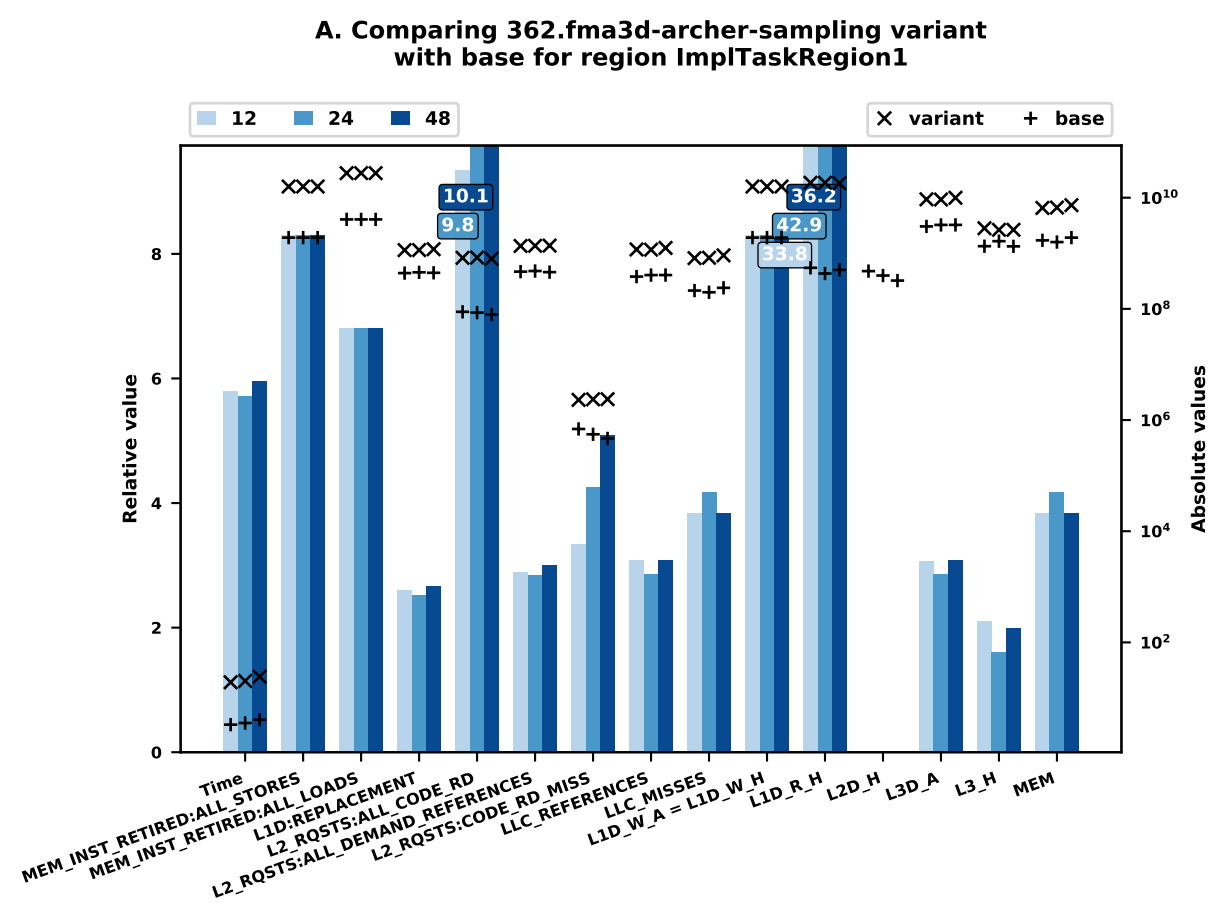
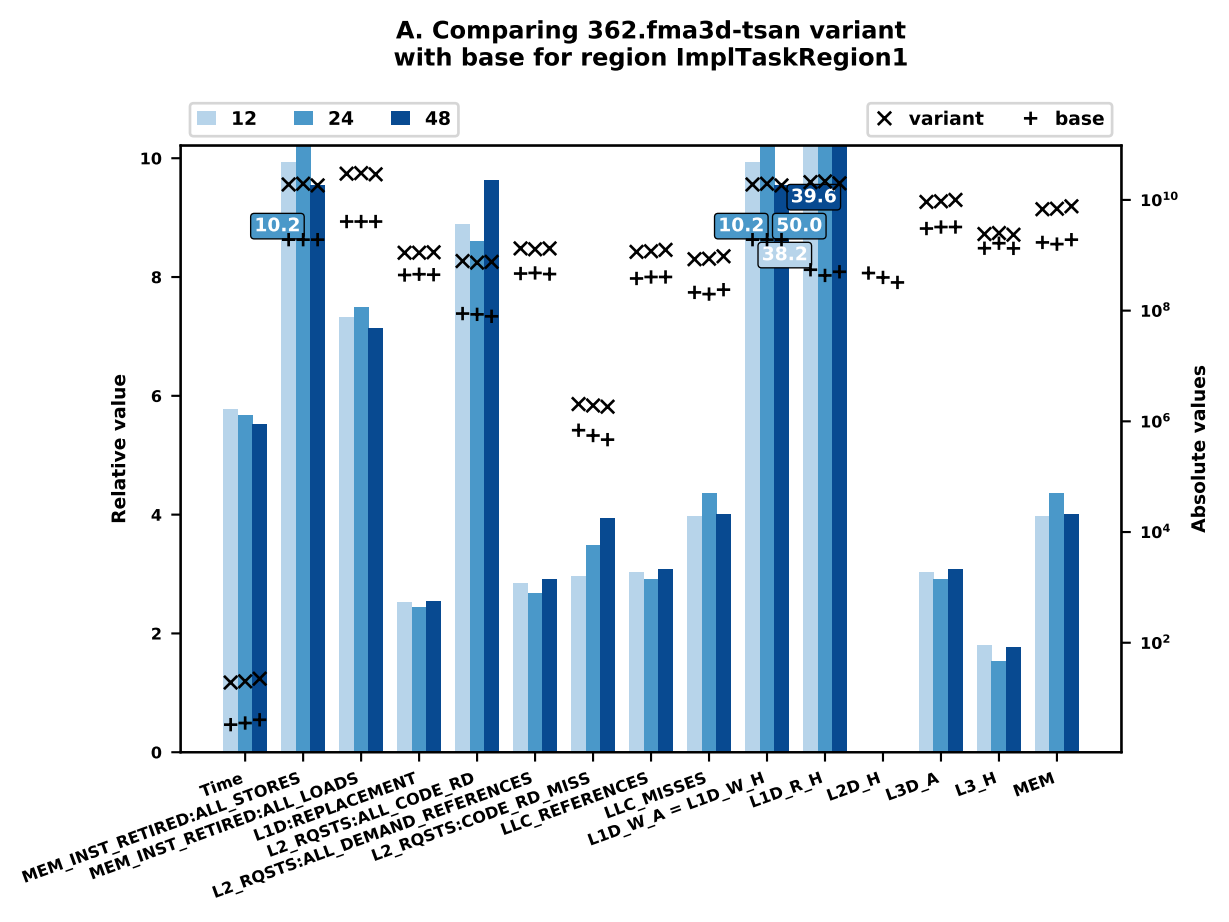

12
24
48
base
tsan-noread
archer-noread
tsan-sampling
archer-sampling
tsan
archer
Execution time [s]
14.0
79
16.2
39.0
7.8
17.9
84.0
17.8
10.9
21.8
74.4
24.5
10.8
60.5
38.3
27.8
67.5
357
78.6
174
36.1
82.8
131.8
83.0
53.5
36.3
586.5
181.8
89.5
565.6
481.6
335.9
72.7
340
62.6
162.4
78.2
224.7
121.2
81.7
56.5
544.5
48.5
188.4
81.9
602.3
500.3
347.5
73.8
386
83.5
185
38.2
88.8
139.3
82.1
59.8
36.8
611.4
200.3
95.0
944.9
568.2
389.3
75.4
361
65.0
173.8
82.5
231.1
124.3
85.6
55.2
608
212.6
92.1
49.8
980.4
603.0
400.4
62.4
363
80.3
175
36.8
84.7
147.2
73.7
58.2
44.1
521.4
199.5
89.0
3213.7
1188.5
584.0
66.4
334
62.1
164.0
77.9
229.7
118.0
79.1
52.9
537
184.0
81.0
48.
3194.7
1202.8
609.1
ImplTaskRegion1
ImplTaskRegion2
ImplTaskRegion3
ImplTaskRegion4
ImplTaskRegion5
ImplTaskRegion6
ImplTaskRegion7
ImplTaskRegion8
ImplTaskRegion9
ImplTaskRegion10
ImplTaskRegion11
ImplTaskRegion12
ImplTaskRegion13
ImplTaskRegion14
ImplTaskRegion15
ImplTaskRegion16
ImplTaskRegion17
ImplTaskRegion18
ImplTaskRegion19
ImplTaskRegion20
ImplTaskRegion21
ImplTaskRegion22
ImplTaskRegion23
ImplTaskRegion24
ImplTaskRegion25
ImplTaskRegion26
ImplTaskRegion27
ImplTaskRegion28
ImplTaskRegion29
ImplTaskRegion30
ImplTaskRegion31
ImplTaskRegion32
ImplTaskRegion33
ImplTaskRegion34
ImplTaskRegion35
ImplTaskRegion36
ImplTaskRegion37
ImplTaskRegion38
ImplTaskRegion39
ImplTaskRegion40
ImplTaskRegion41
ImplTaskRegion42
ImplTaskRegion43
ImplTaskRegion44
ImplTaskRegion45
ImplTaskRegion46
ImplTaskRegion47
ImplTaskRegion48
ImplTaskRegion49
ImplTaskRegion50
ImplTaskRegion51

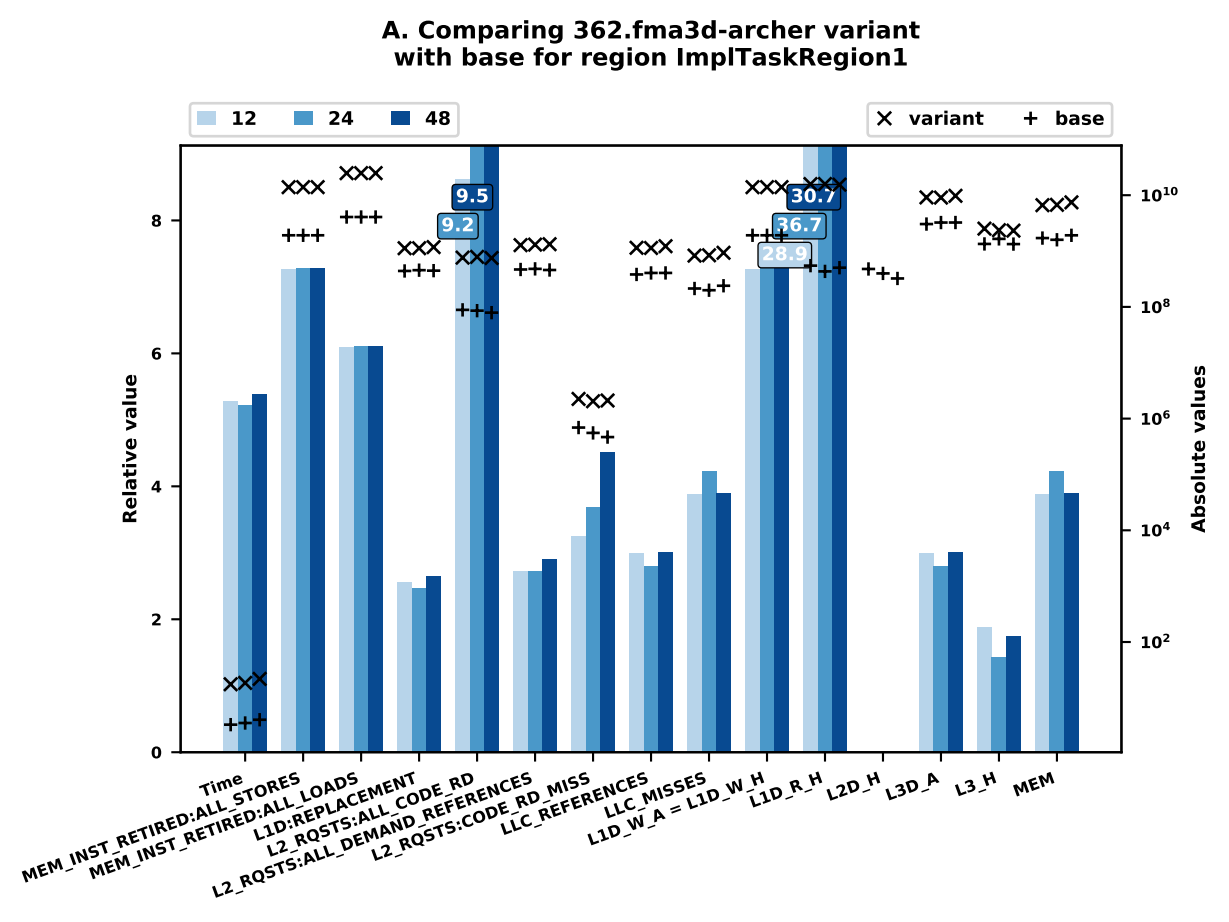

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
0
2
4
6
8
10
10^2
10^4
10^6
10^8
10^{10}
11.1
11.1
45.5
45.3
37.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

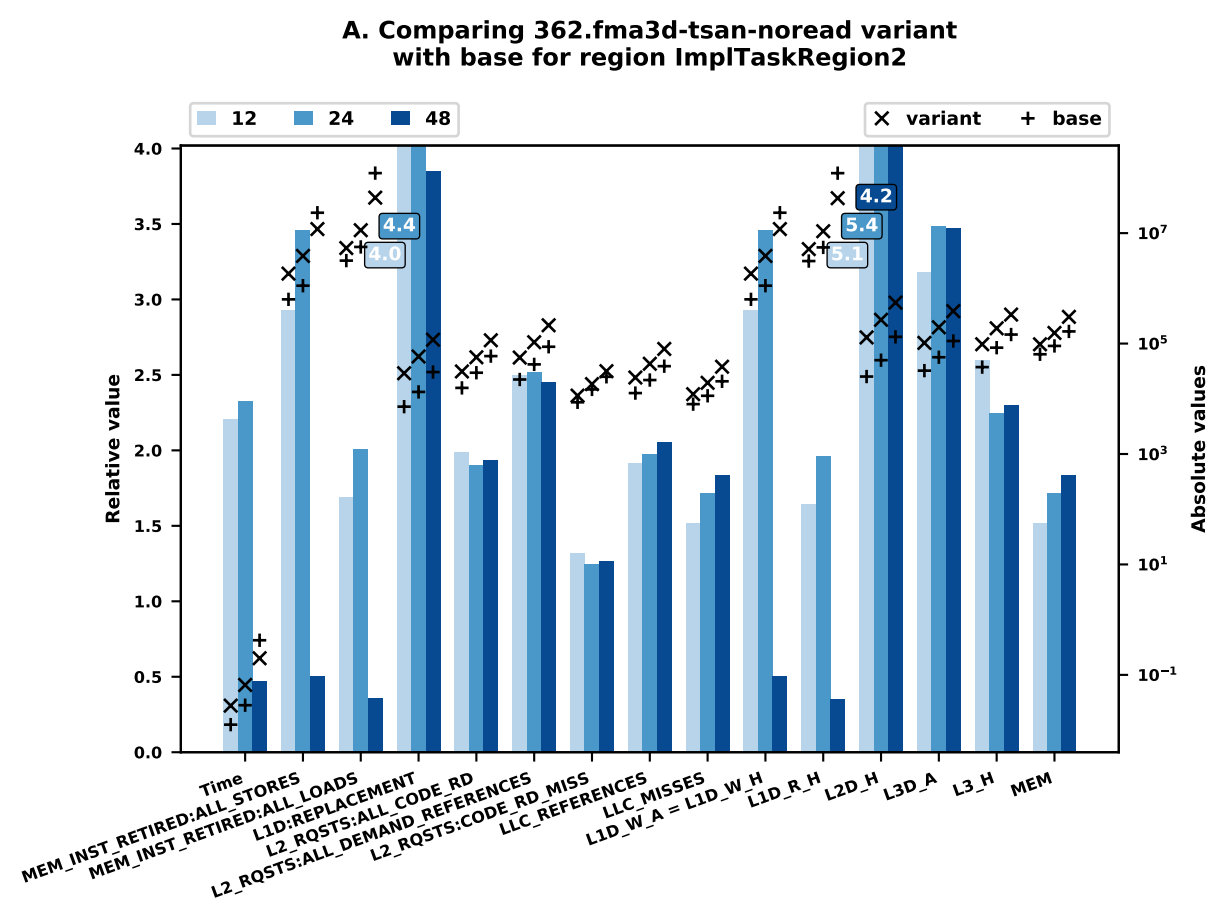

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
6
7
8
10^{2}
10^{4}
10^{6}
10^{8}
10^{10}
9.3
30.7
36.3
28.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

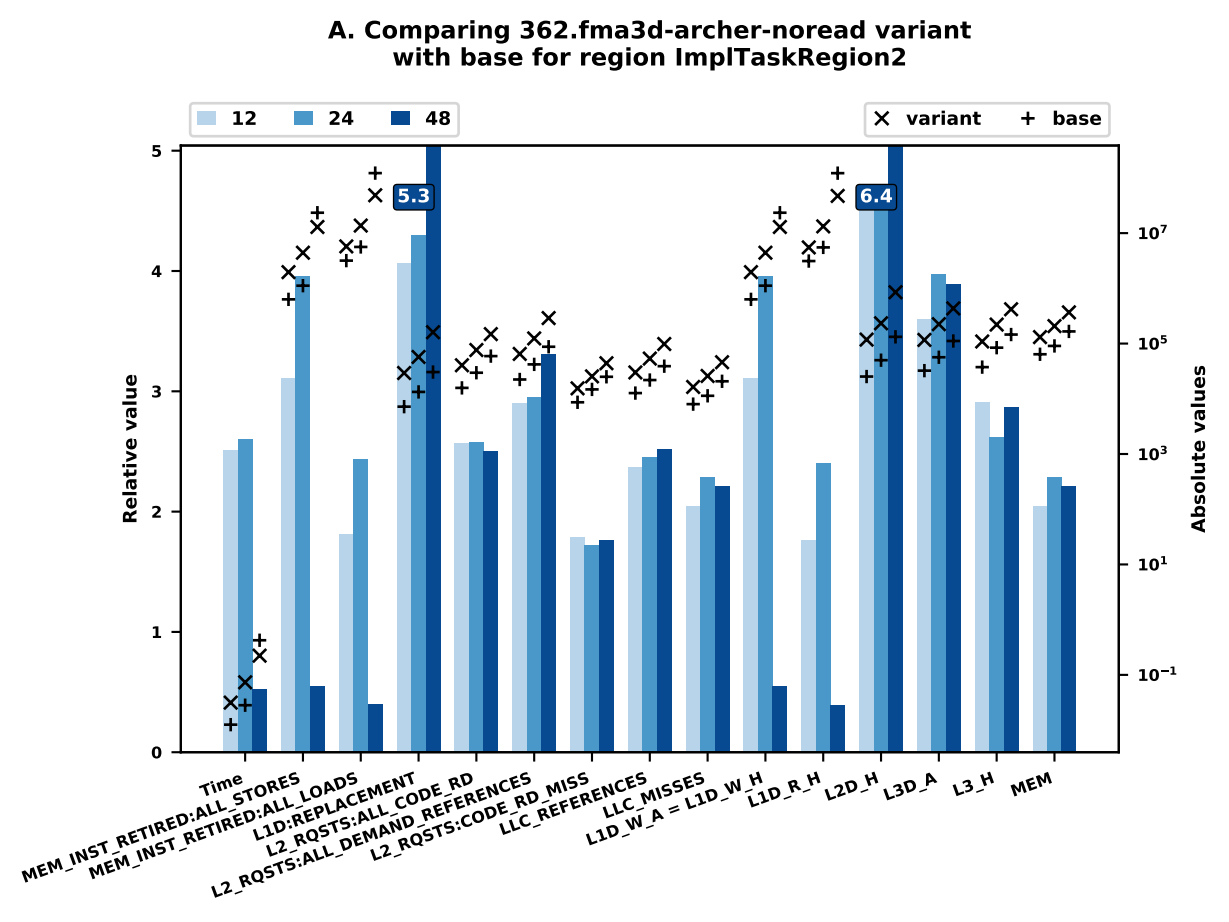

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
12.2
12.2
50.7
51.8
41.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

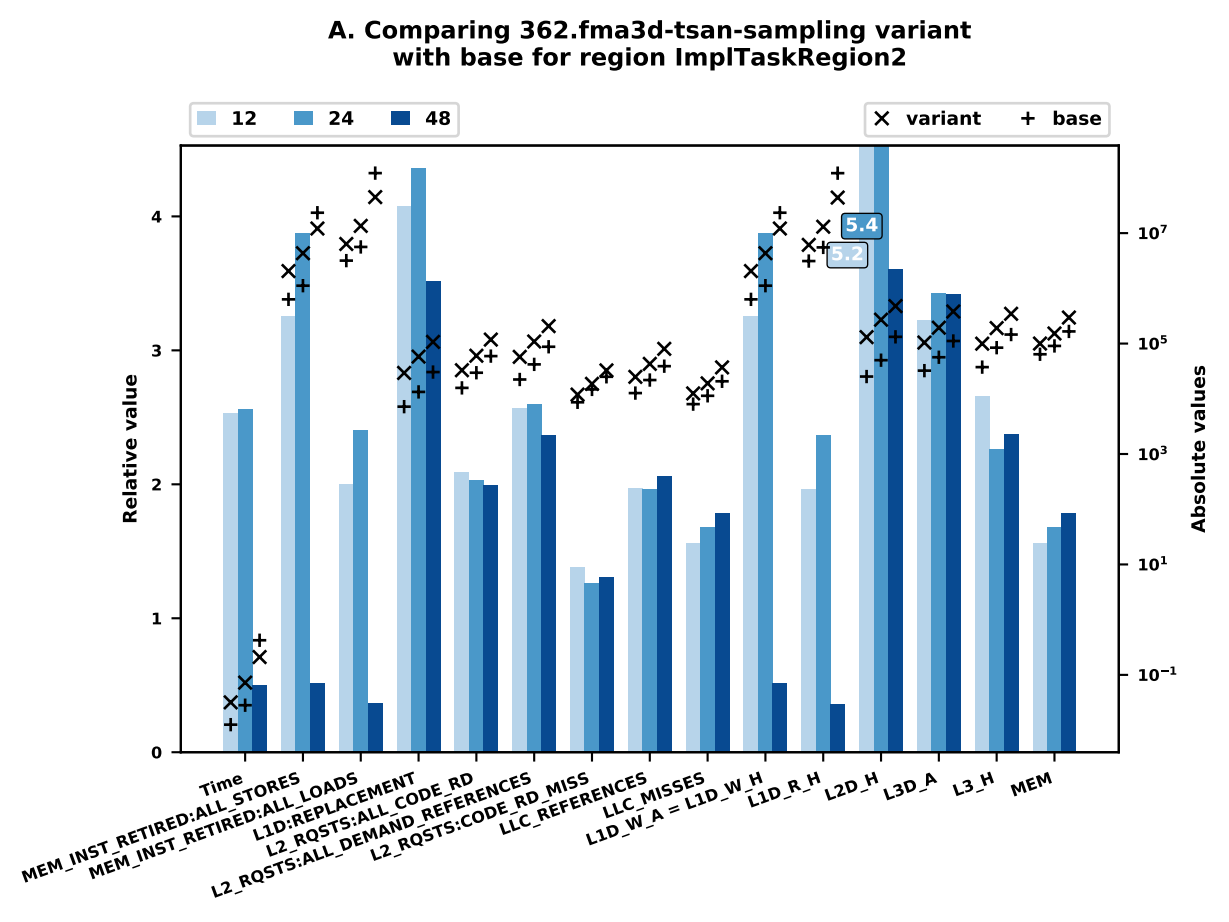

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion1
12
24
48
variant
base
10.1
9.8
36.2
42.9
33.8
Relative value
Absolute values
0
2
4
6
8
10^{2}
10^{4}
10^{6}
10^{8}
10^{10}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

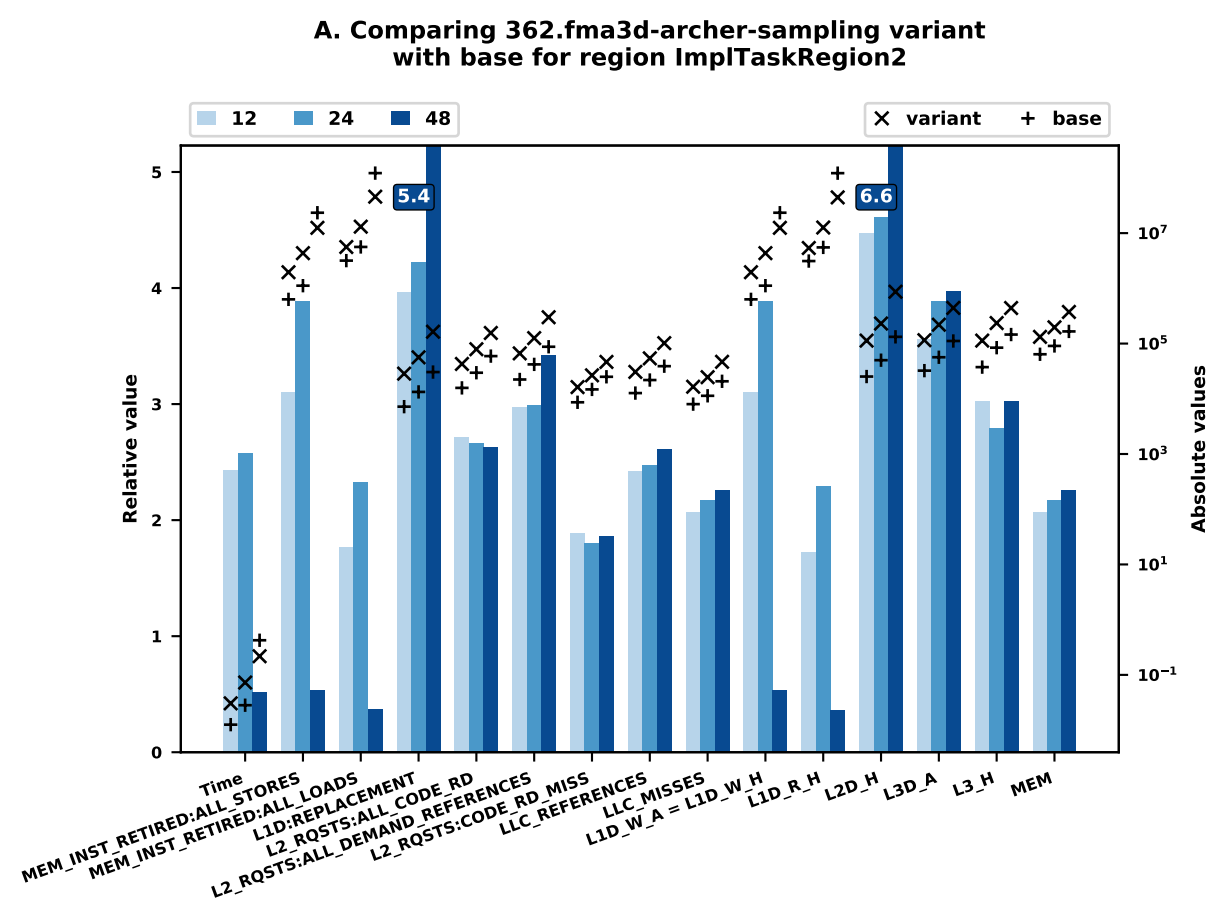

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
10.2
10.2
50.0
39.6
38.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

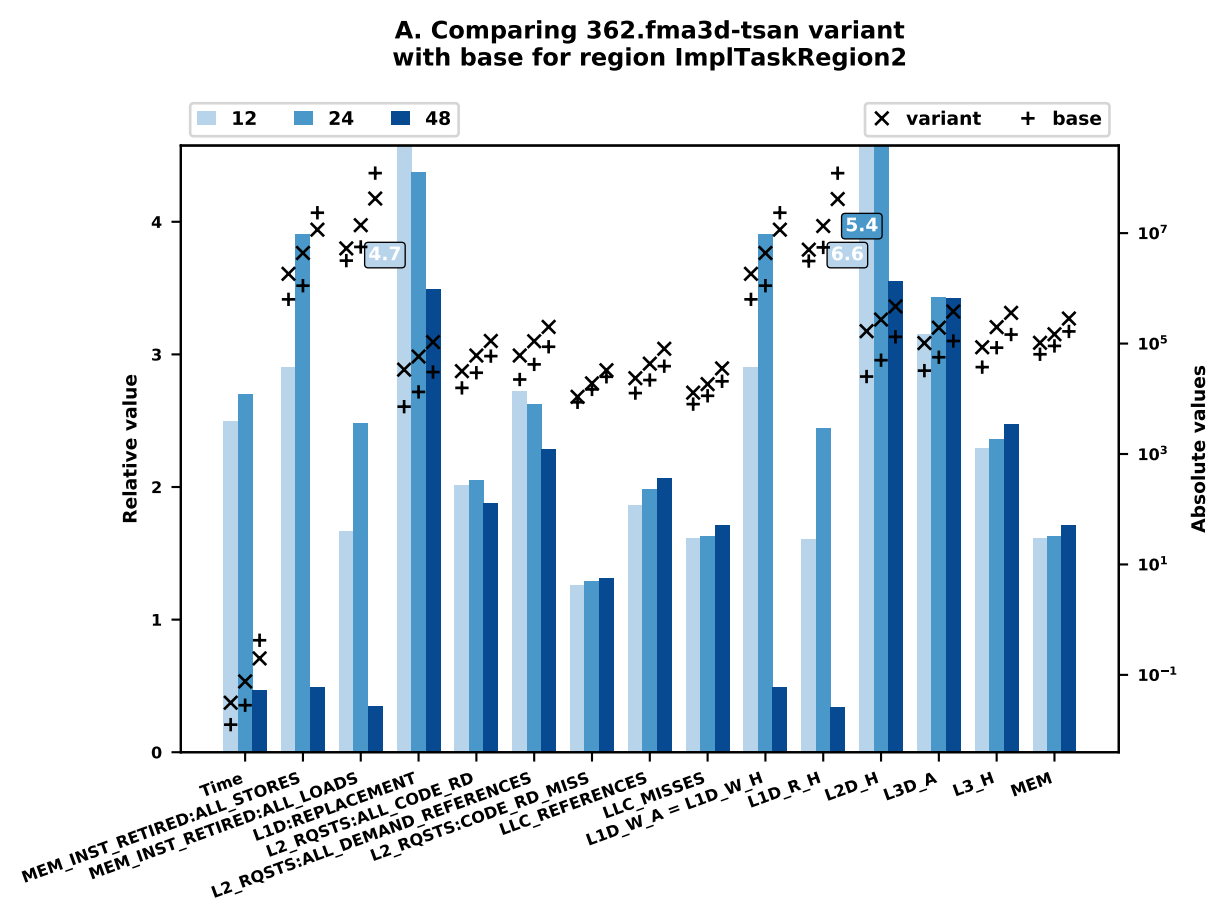

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion1
12
24
48
variant
base
Relative value
Absolute values
0
2
4
6
8
10^2
10^4
10^6
10^8
10^{10}
9.5
9.2
30.7
36.7
28.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

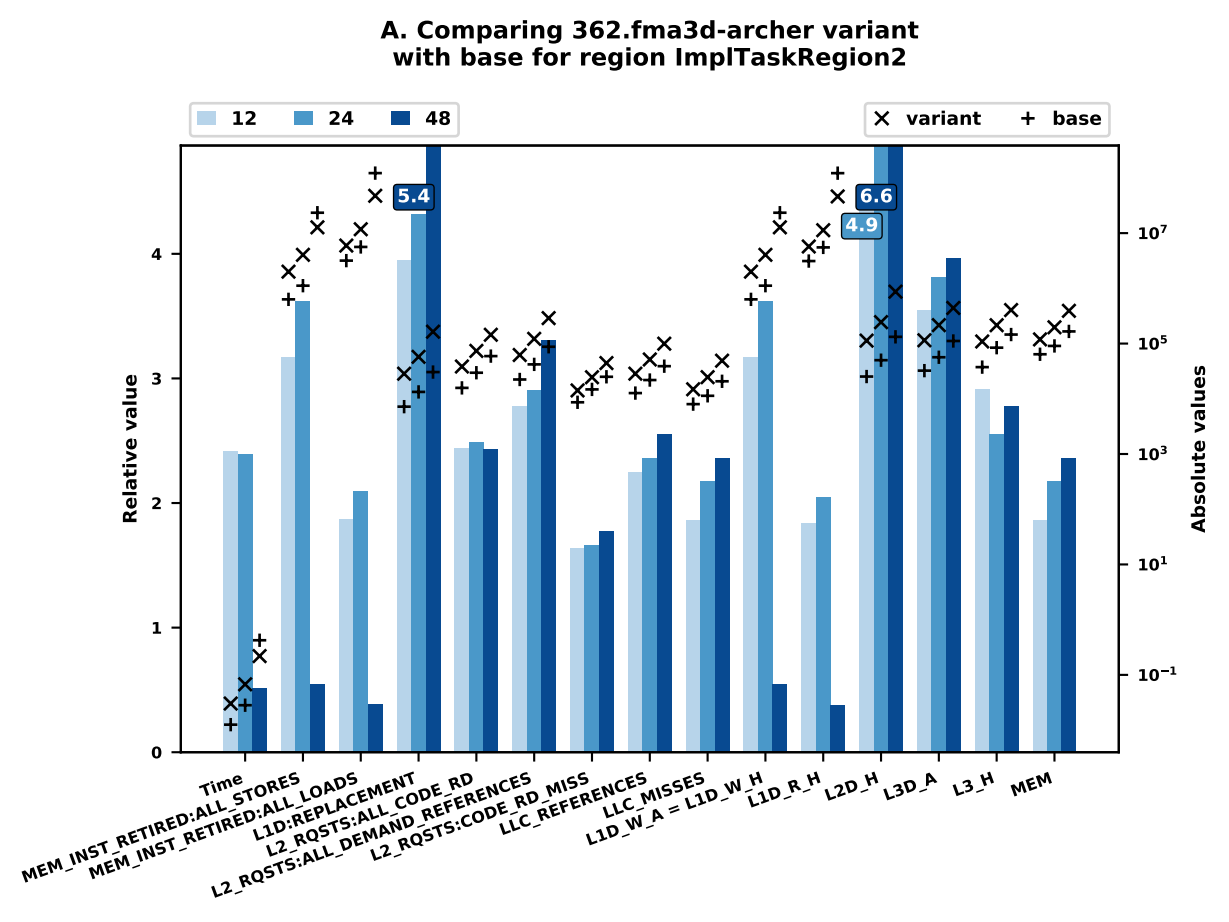

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion2
12
24
48
variant
base
Relative value
Absolute values
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
4.4
4.0
4.2
5.4
5.1
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

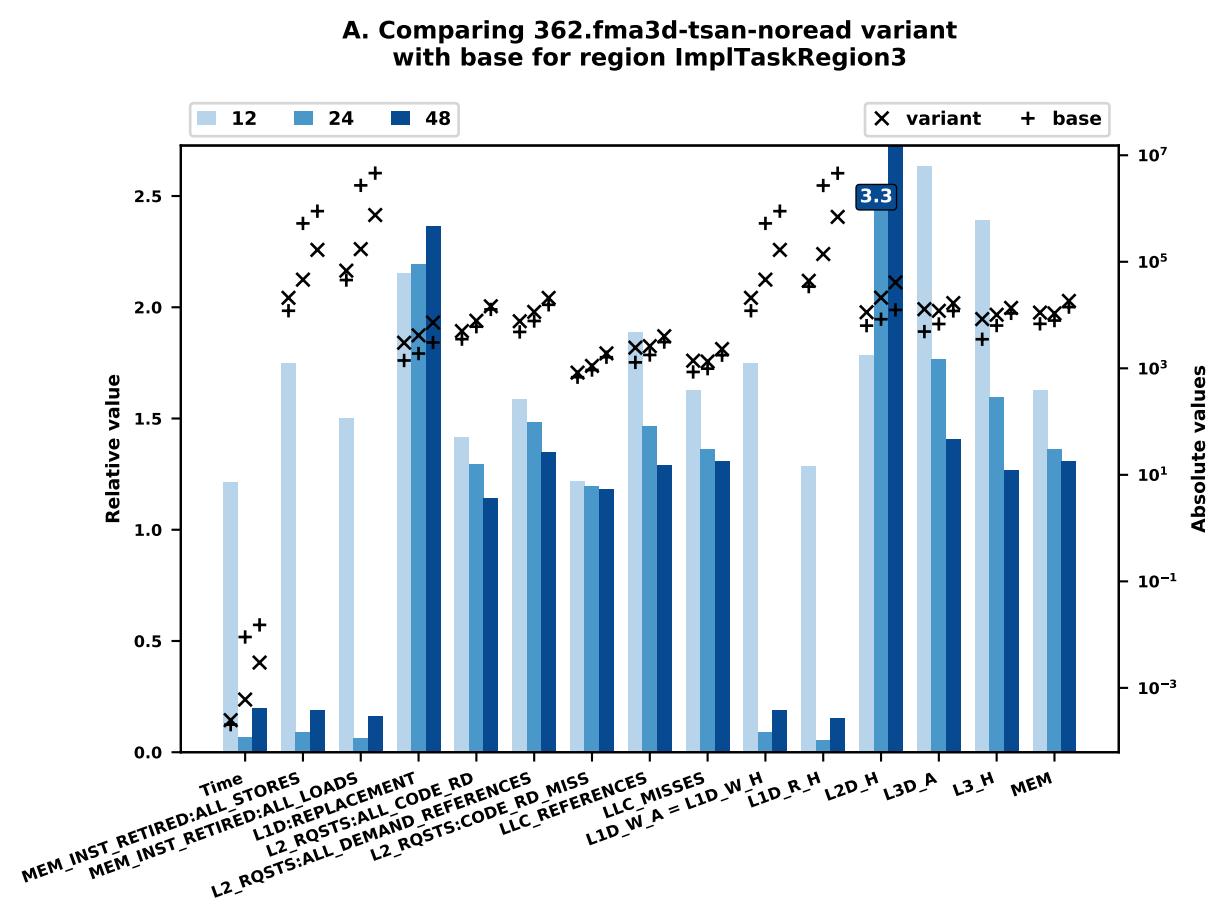

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion2
12
24
48
variant
base
Relative value
Absolute values
5.3
6.4
0
1
2
3
4
5
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

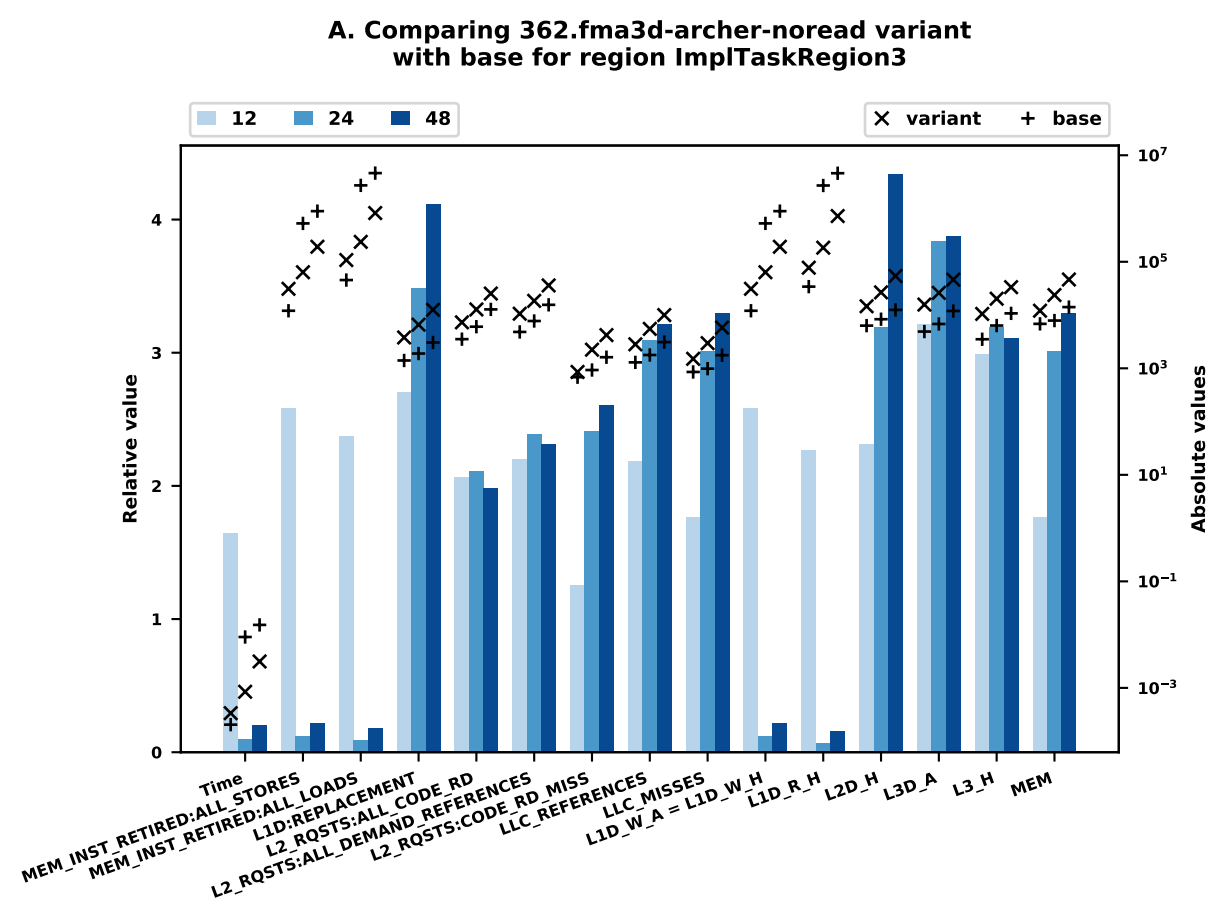

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion2
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
5.4
5.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

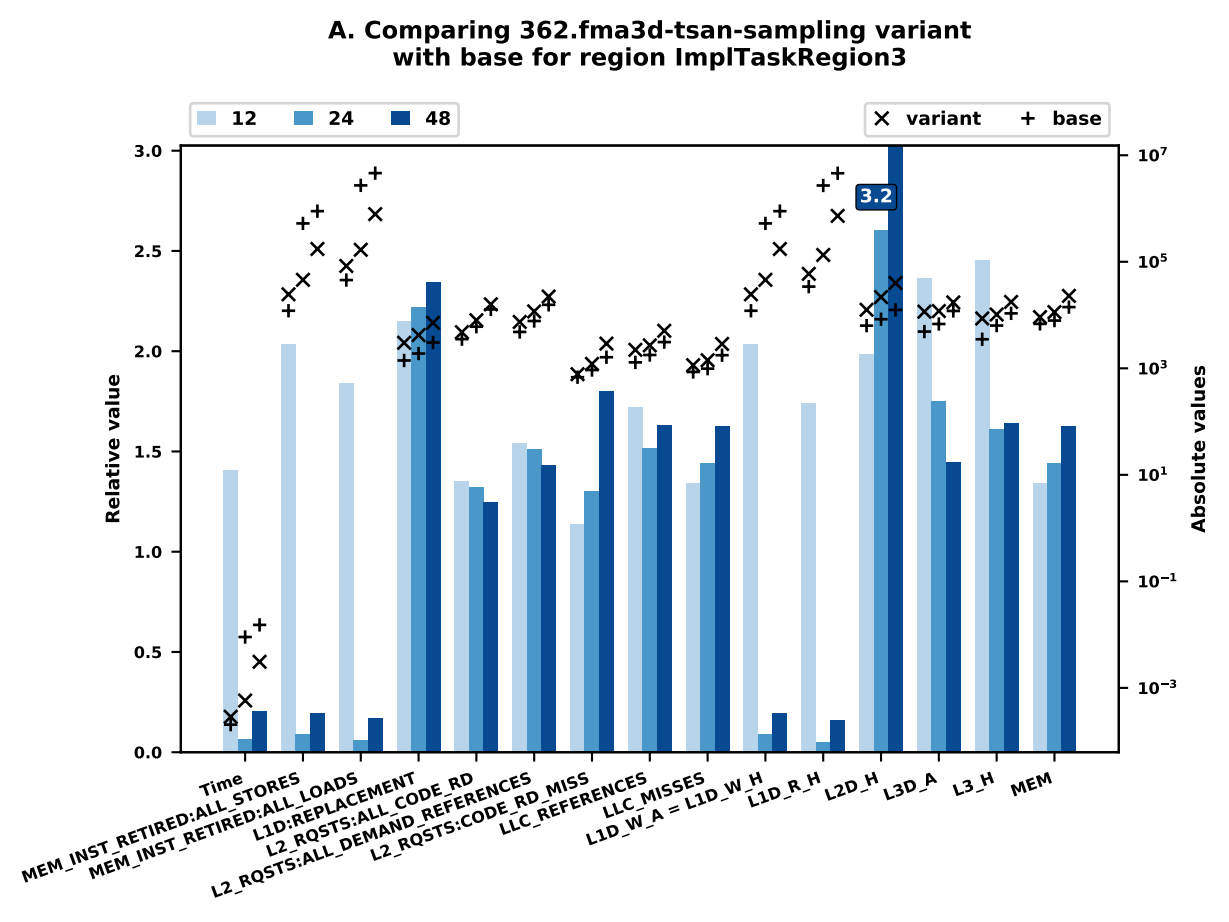

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion2
12
24
48
variant
base
5.4
6.6
Relative value
Absolute values
0
1
2
3
4
5
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

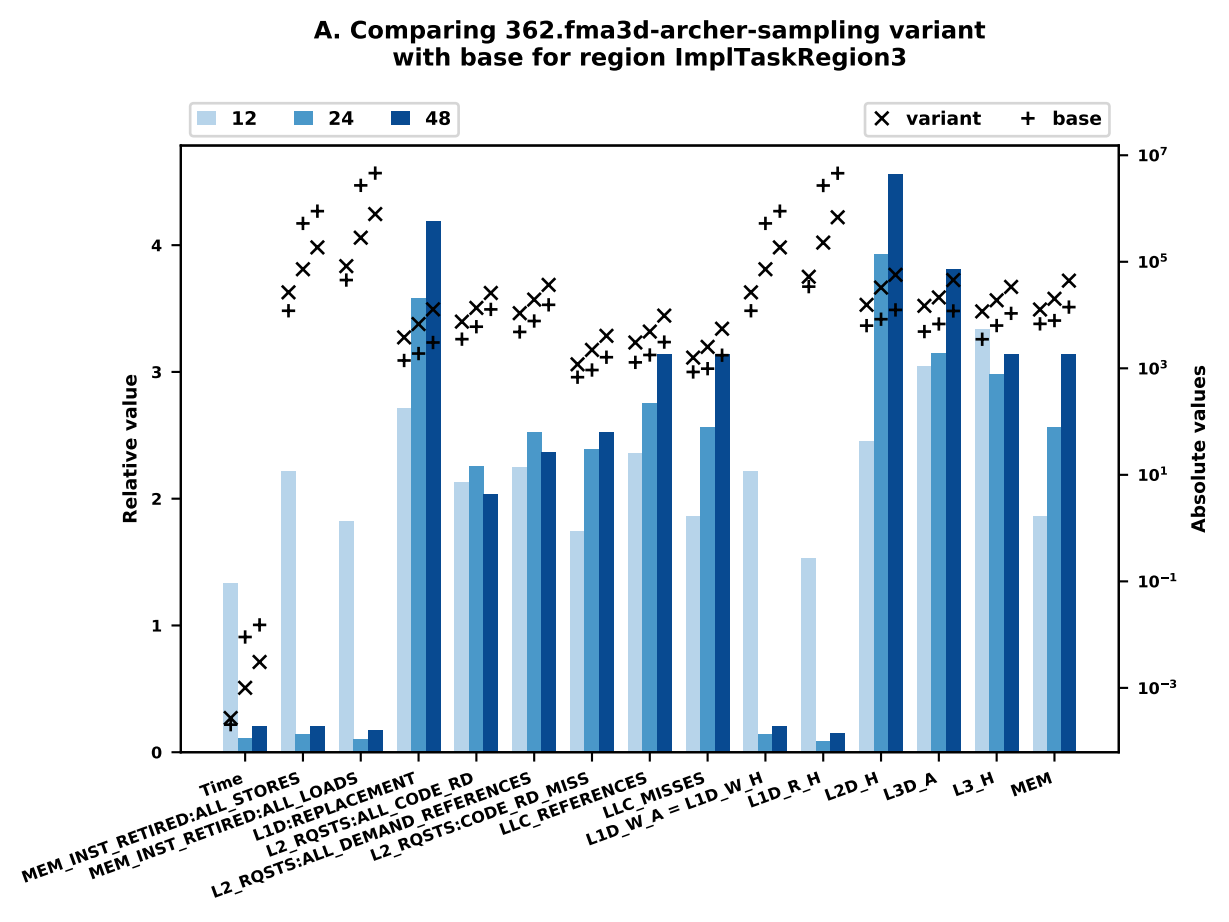

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion2
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
4.7
5.4
6.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

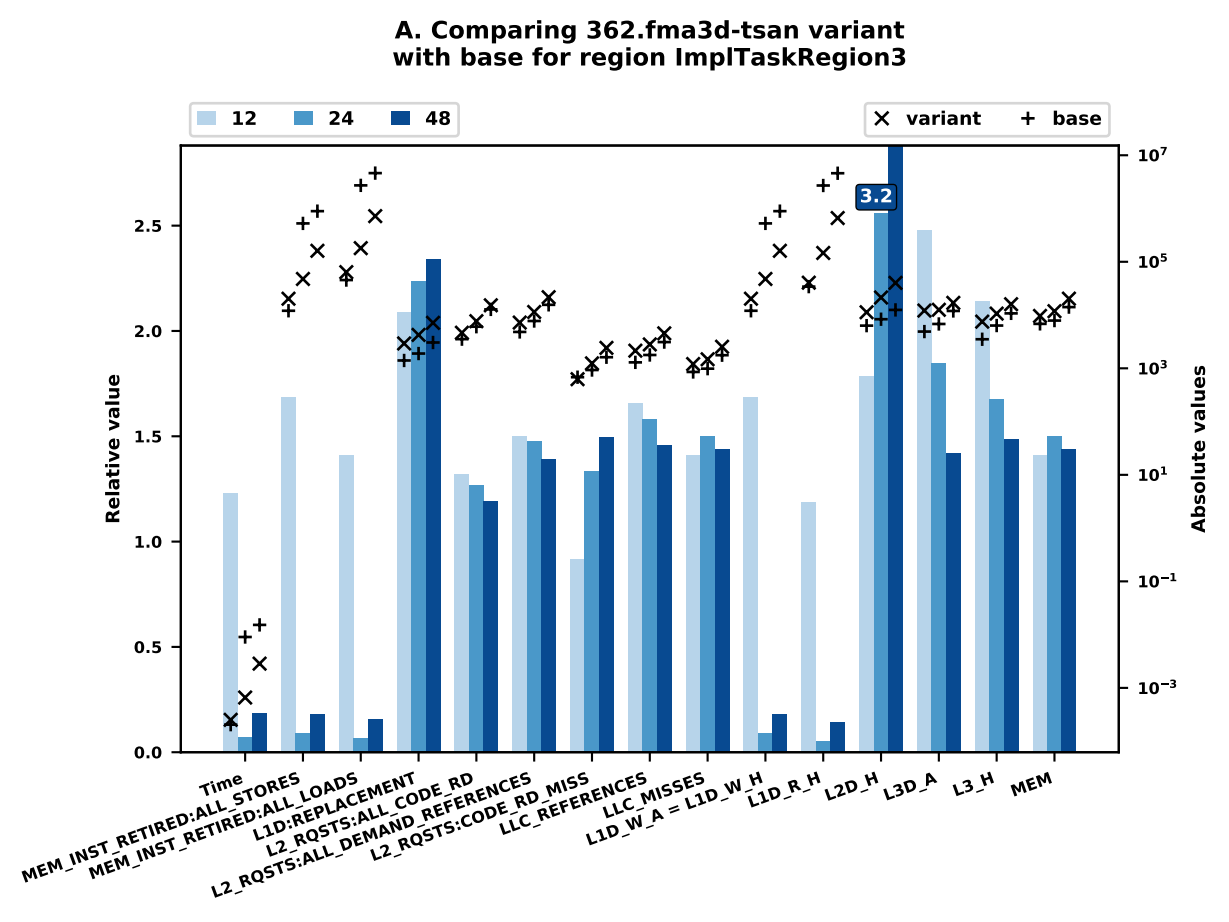

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion2
12
24
48
variant
base
5.4
6.6
4.9
Relative value
Absolute values
0
1
2
3
4
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

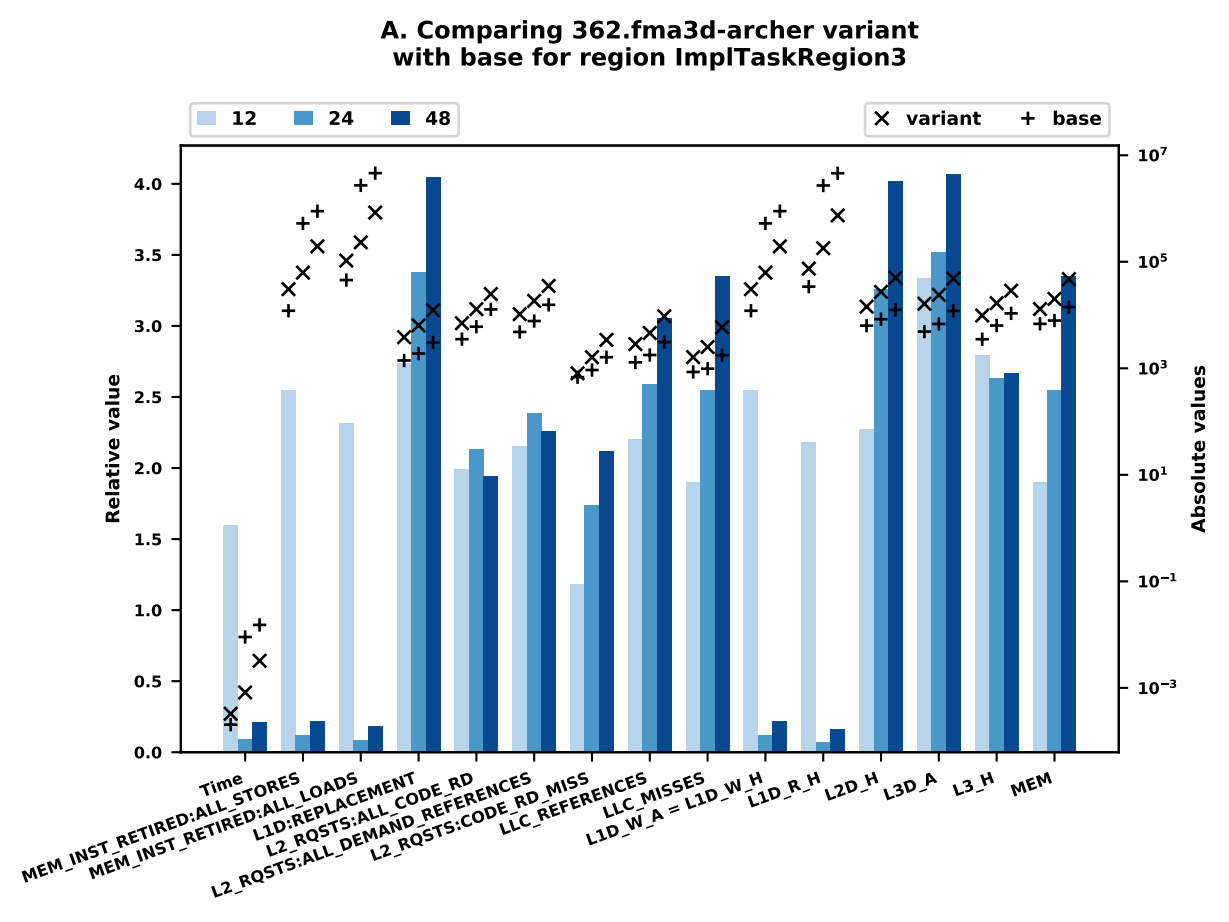

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion3
12
24
48
variant
base
Relative value
Absolute values
3.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

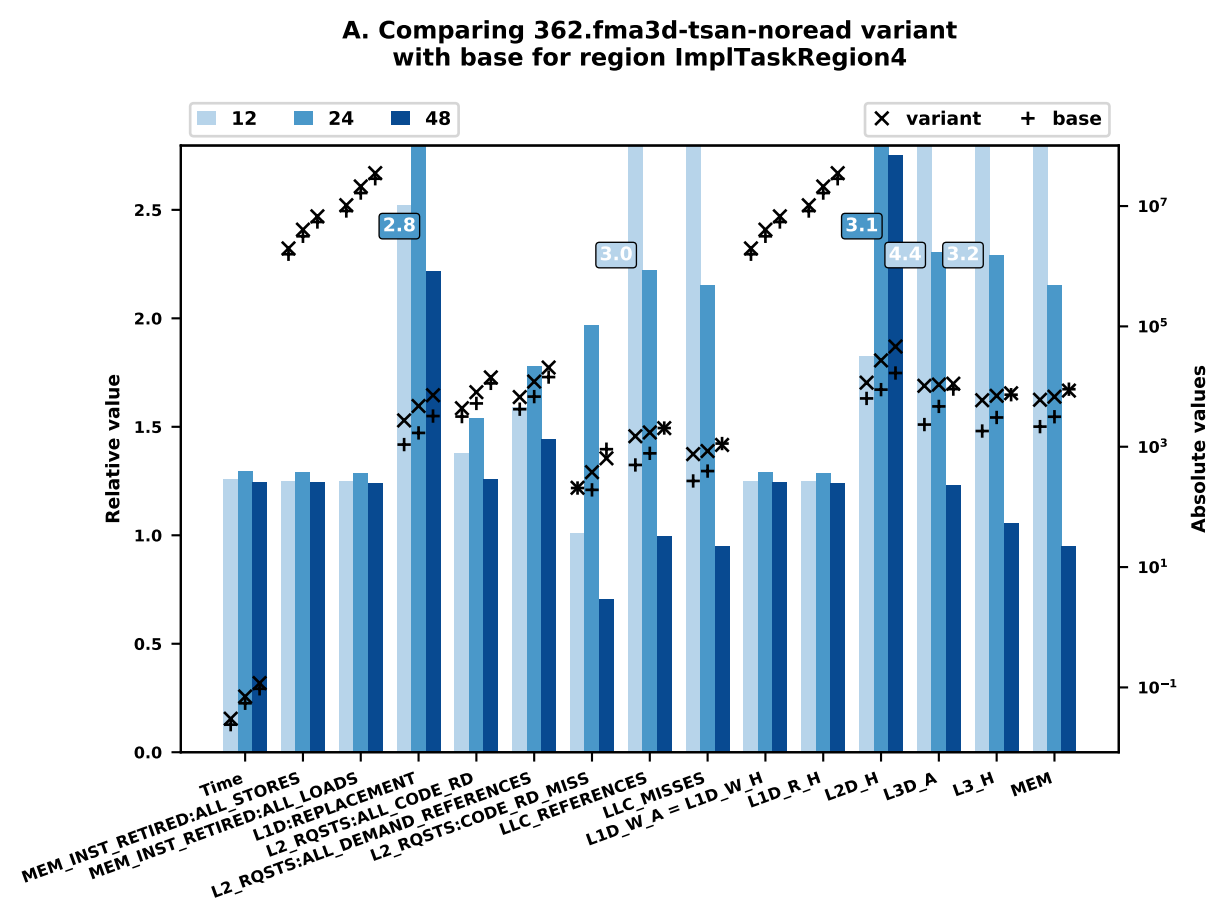

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion3
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

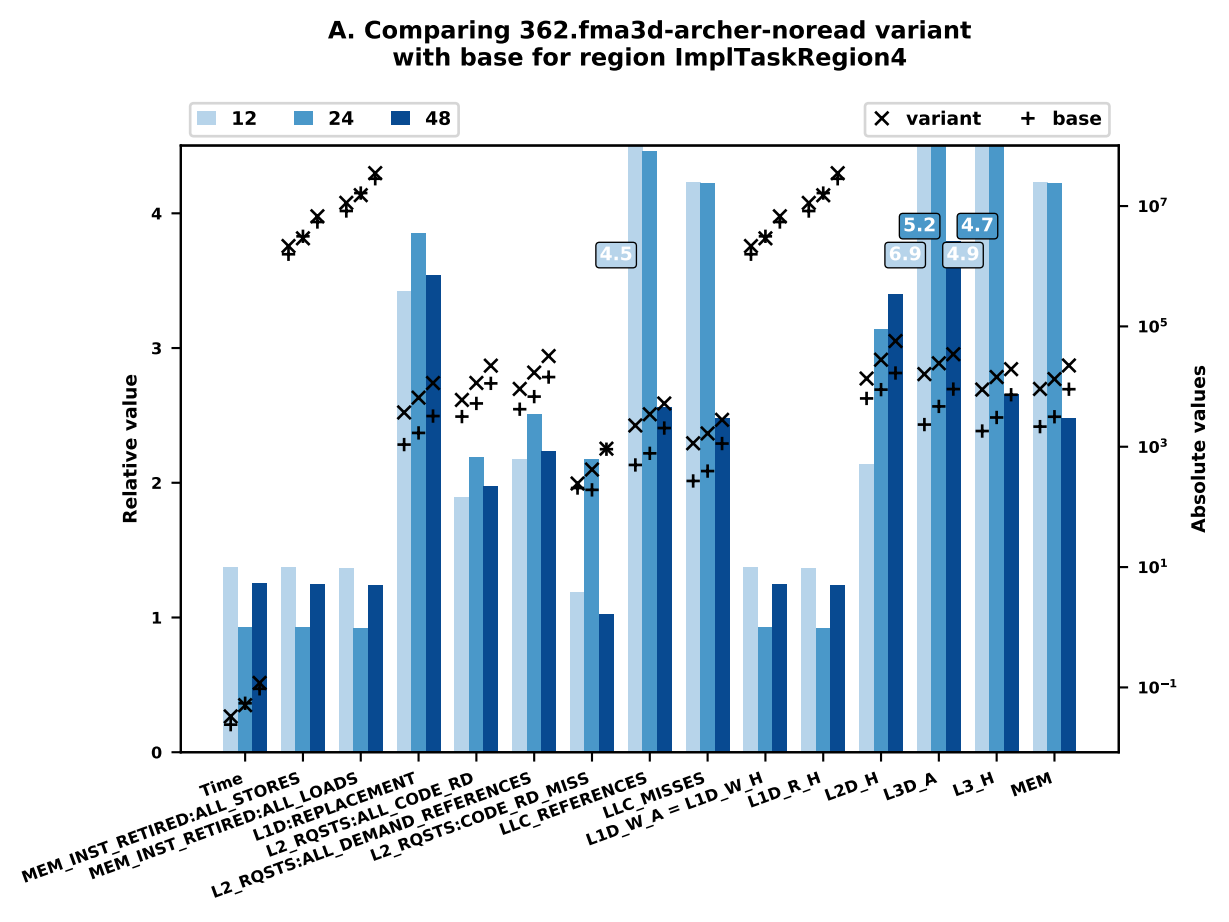

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion3
12
24
48
variant
base
Relative value
Absolute values
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
3.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

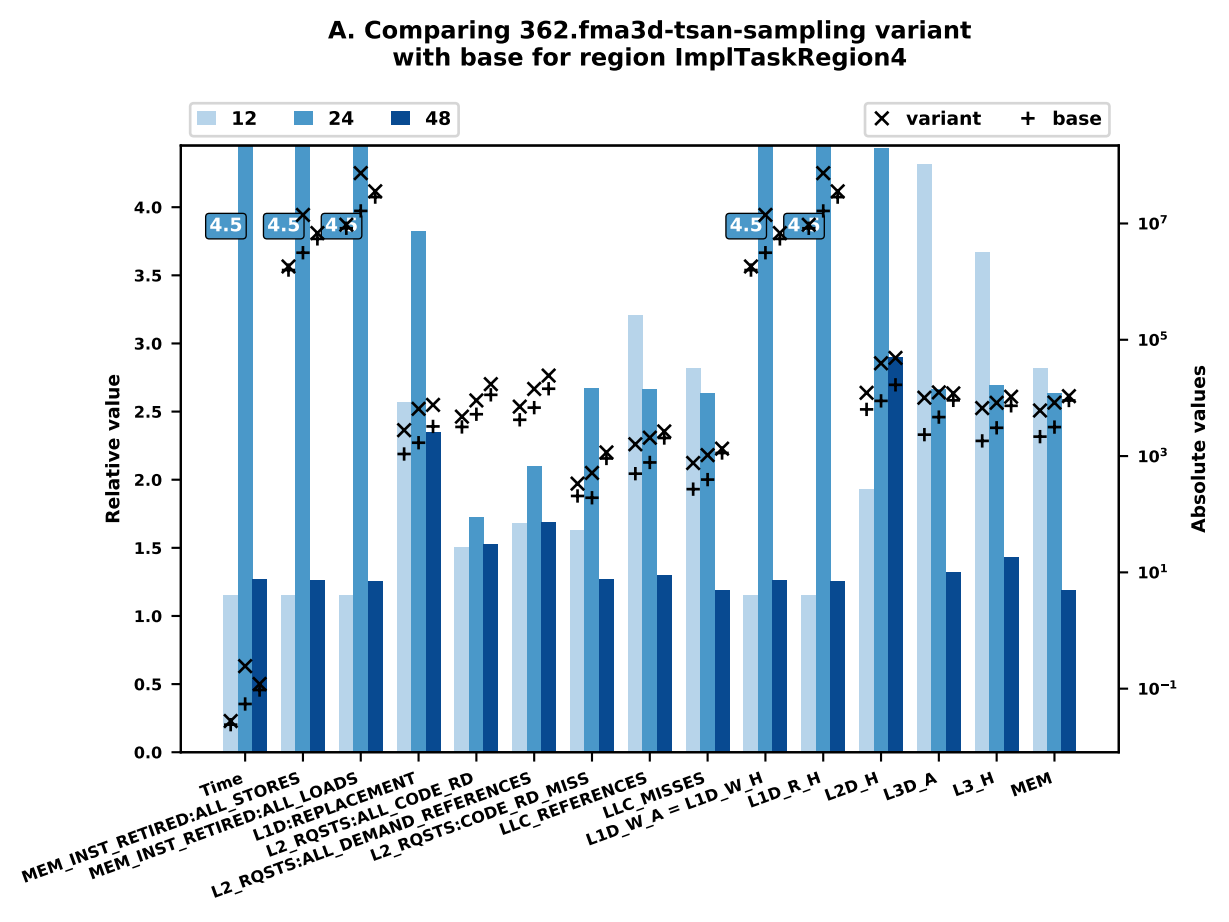

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion3
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

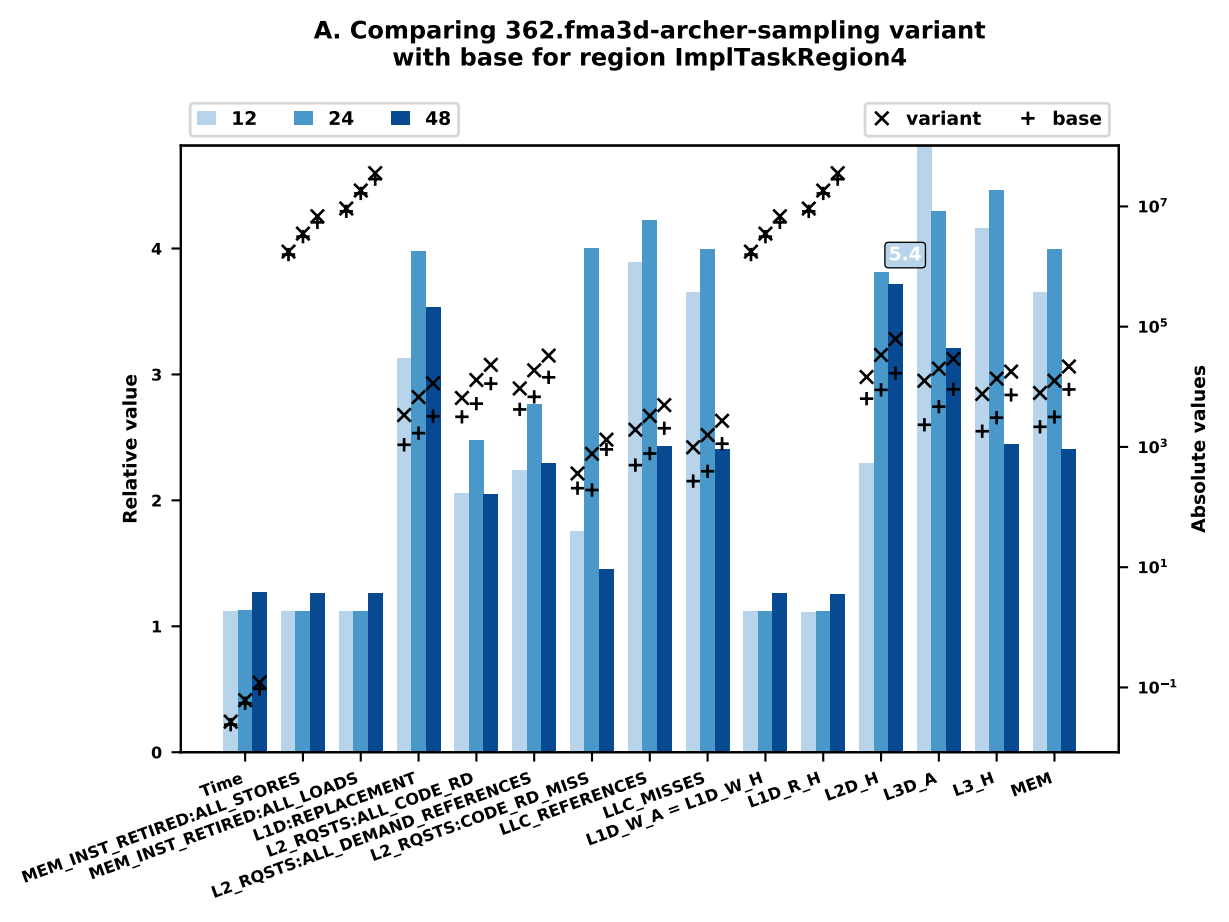

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion3
12
24
48
variant
base
Relative value
Absolute values
3.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

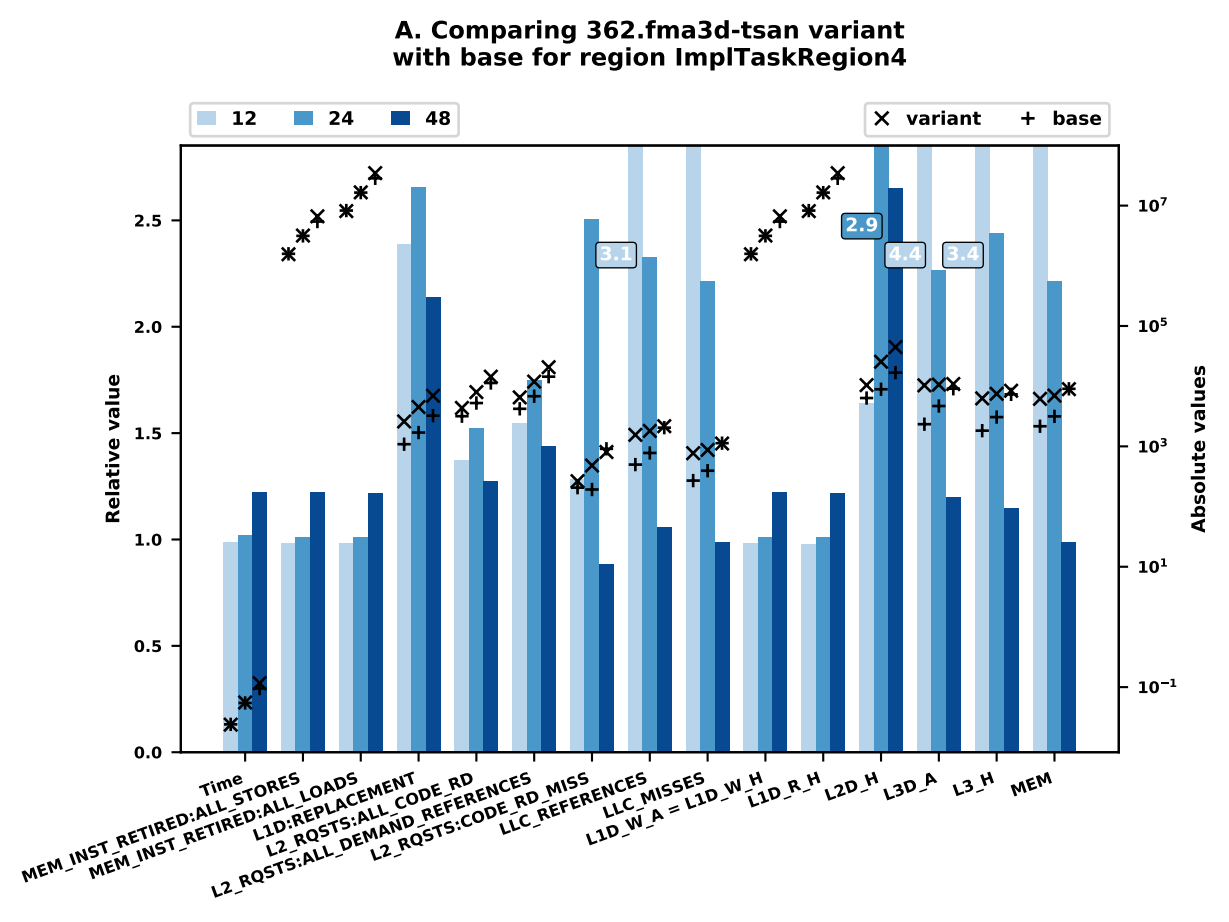

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion3
12
24
48
variant
base
Relative value
Absolute values
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

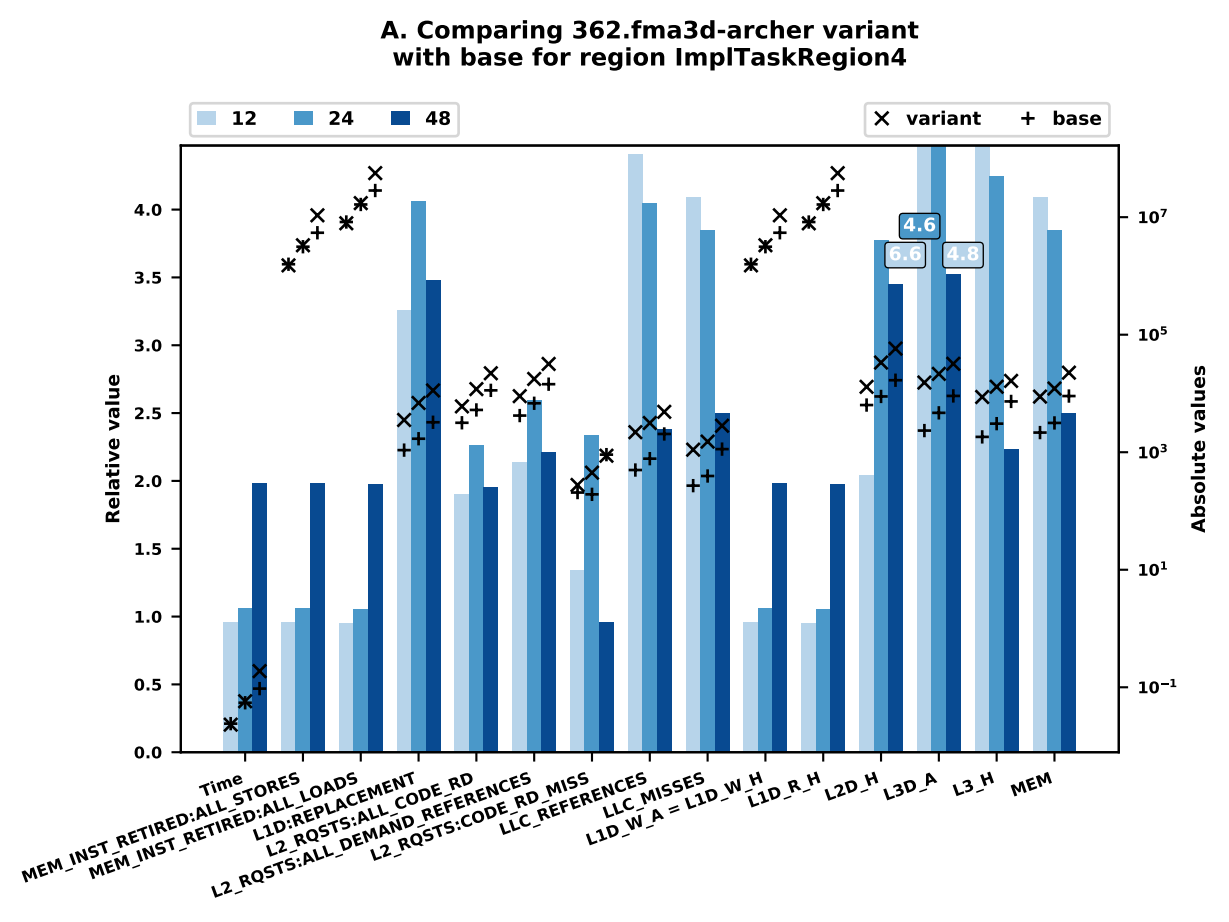

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion4
12
24
48
variant
base
Relative value
Absolute values
2.8
3.0
3.1
4.4
3.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

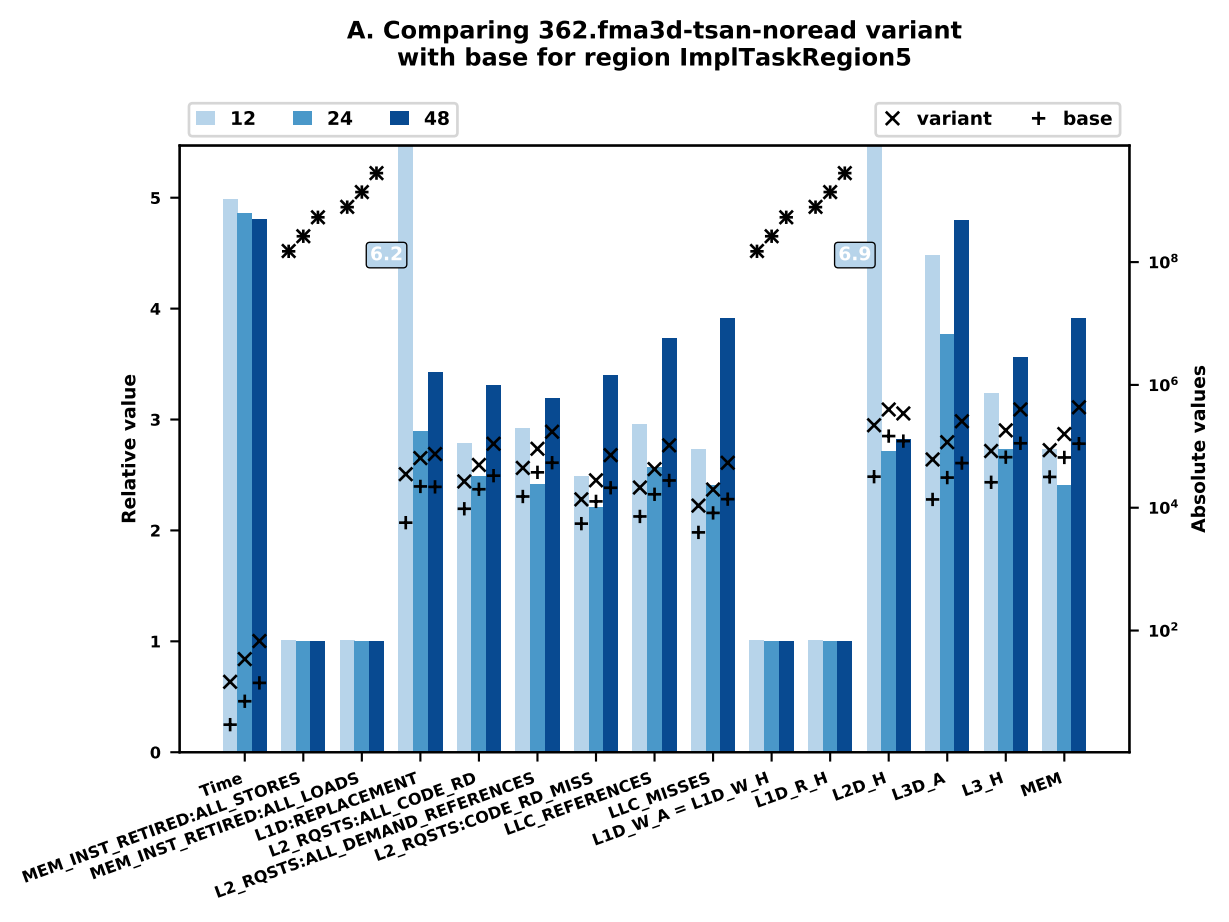

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion4
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
4.5
6.9
5.2
4.9
4.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

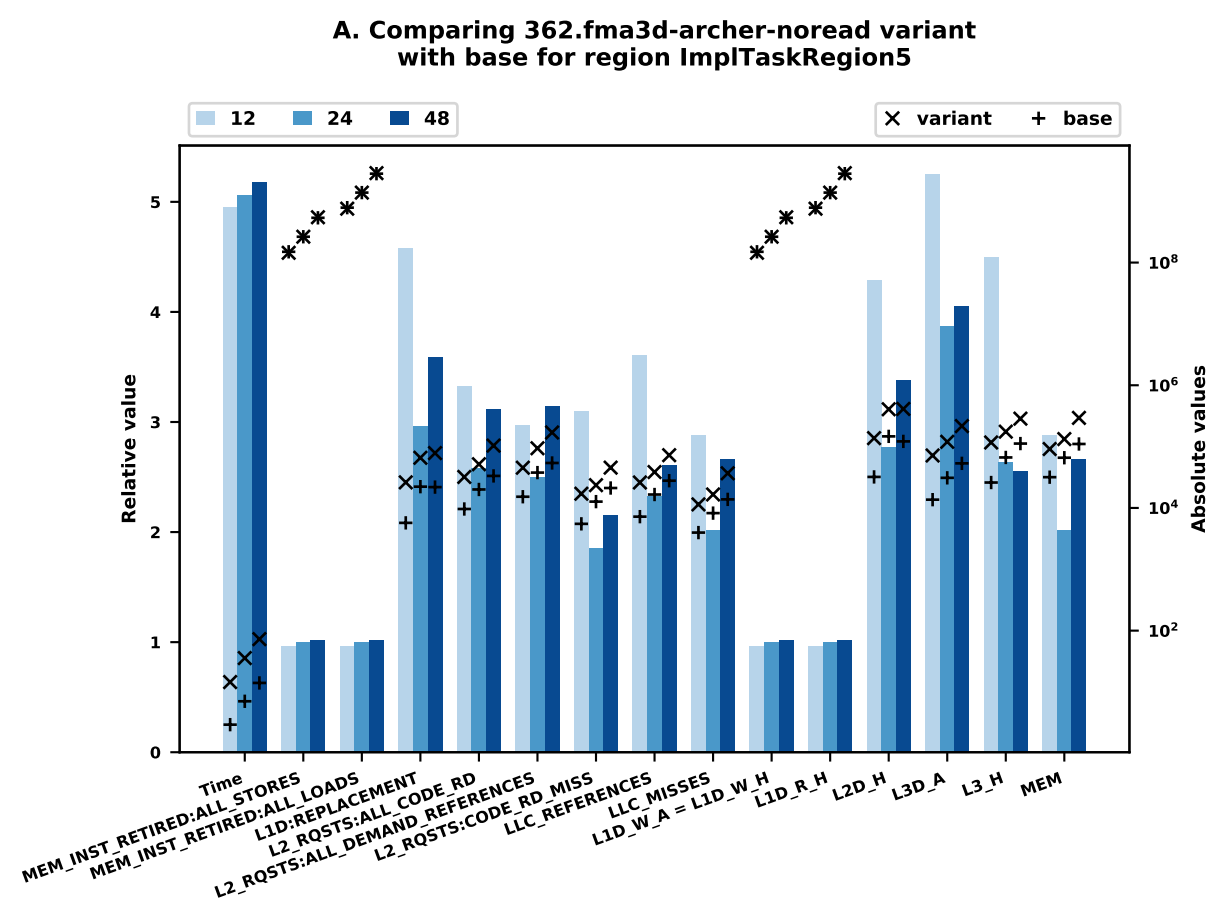

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion4
12
24
48
variant
base
4.5
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

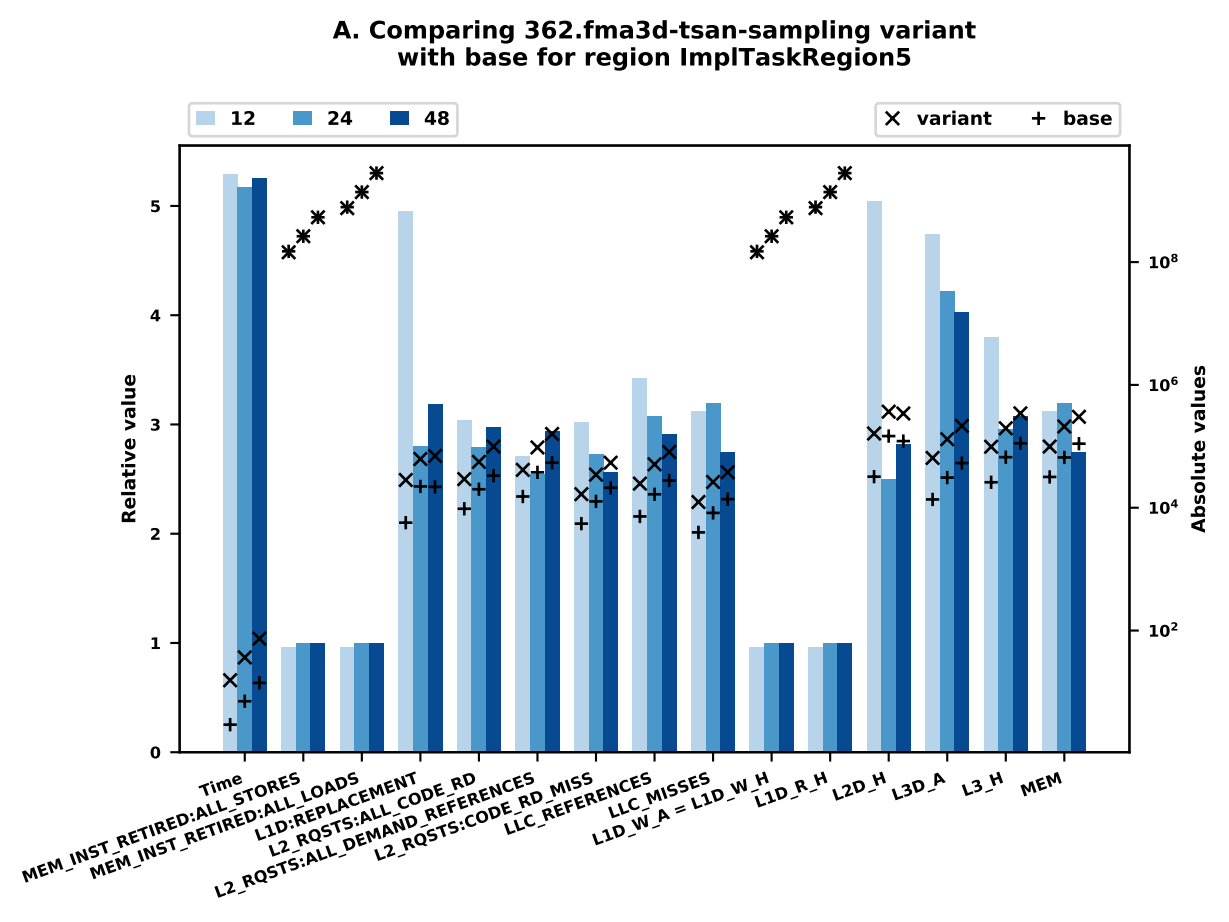

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion4
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
5.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

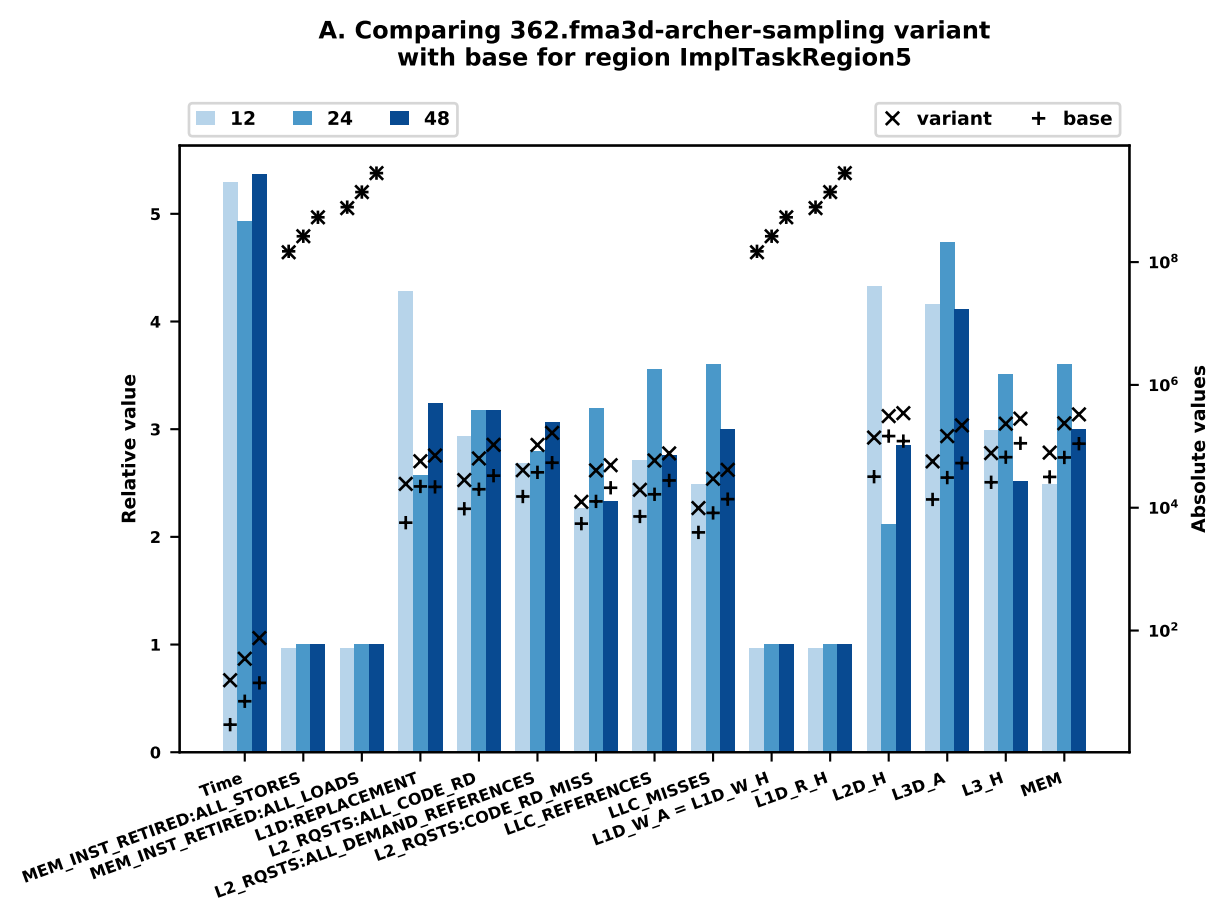

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion4
12
24
48
variant
base
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
3.1
2.9
4.4
3.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

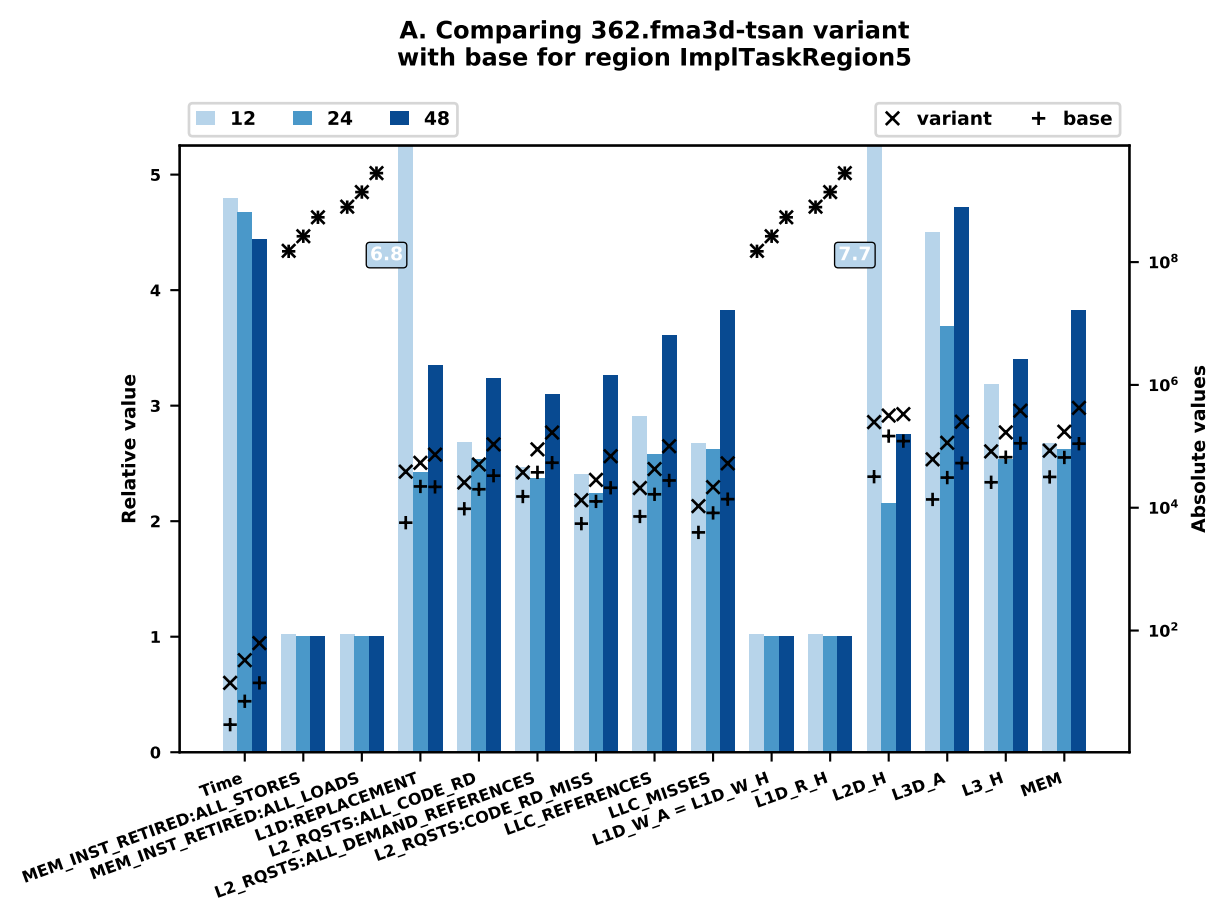

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion4
12
24
48
variant
base
Relative value
Absolute values
4.6
6.6
4.8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

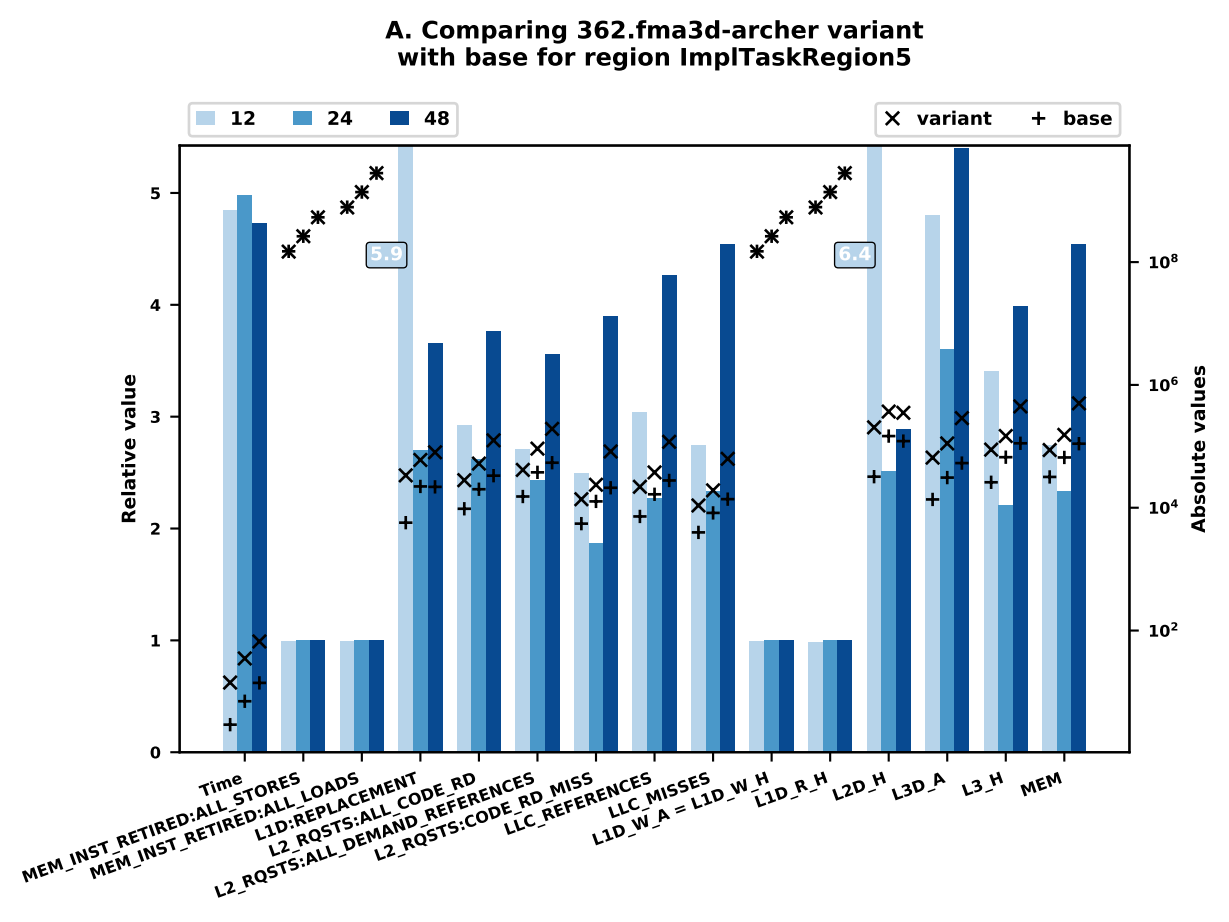

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion5
12
24
48
variant
base
Relative value
Absolute values
6.2
6.9
0
1
2
3
4
5
10^2
10^4
10^6
10^8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

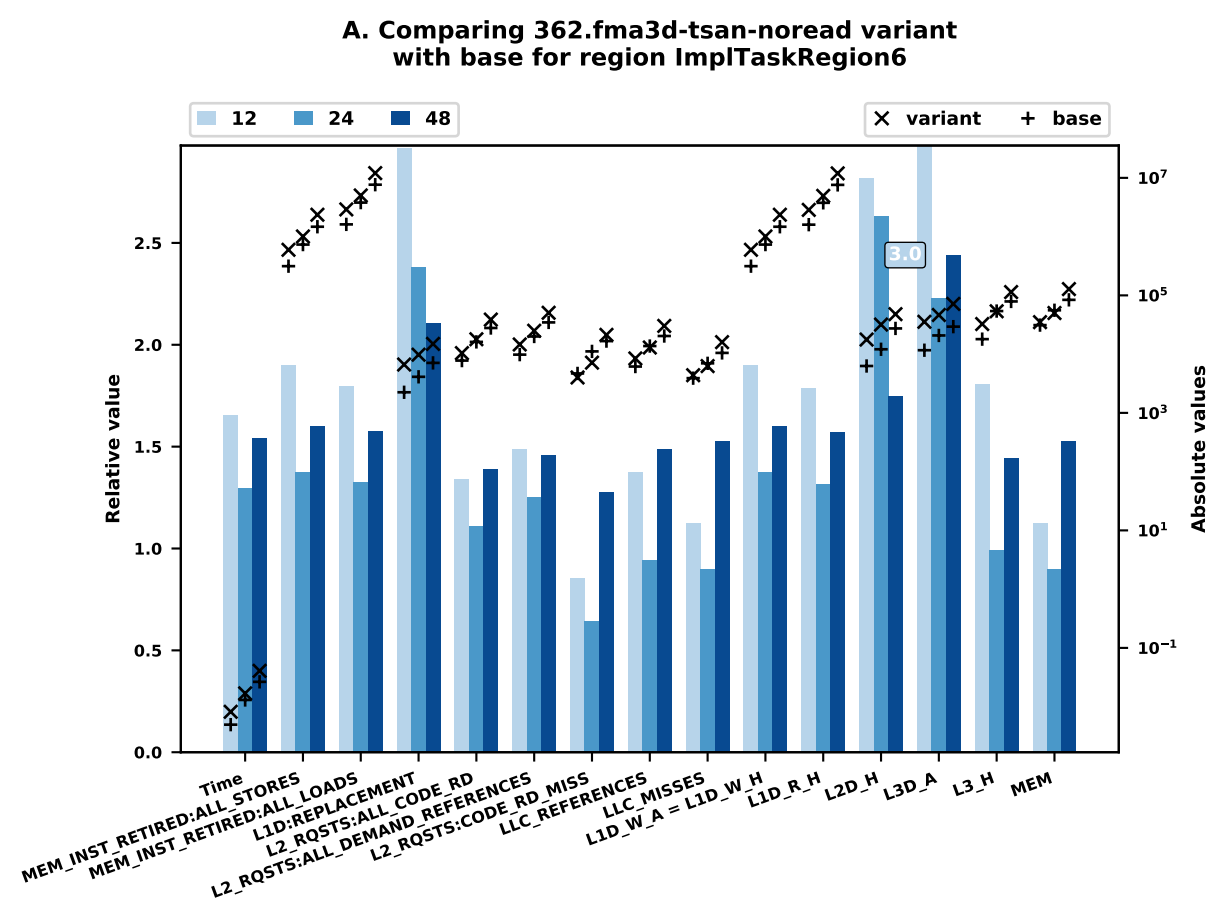

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion5
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
10^2
10^4
10^6
10^8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

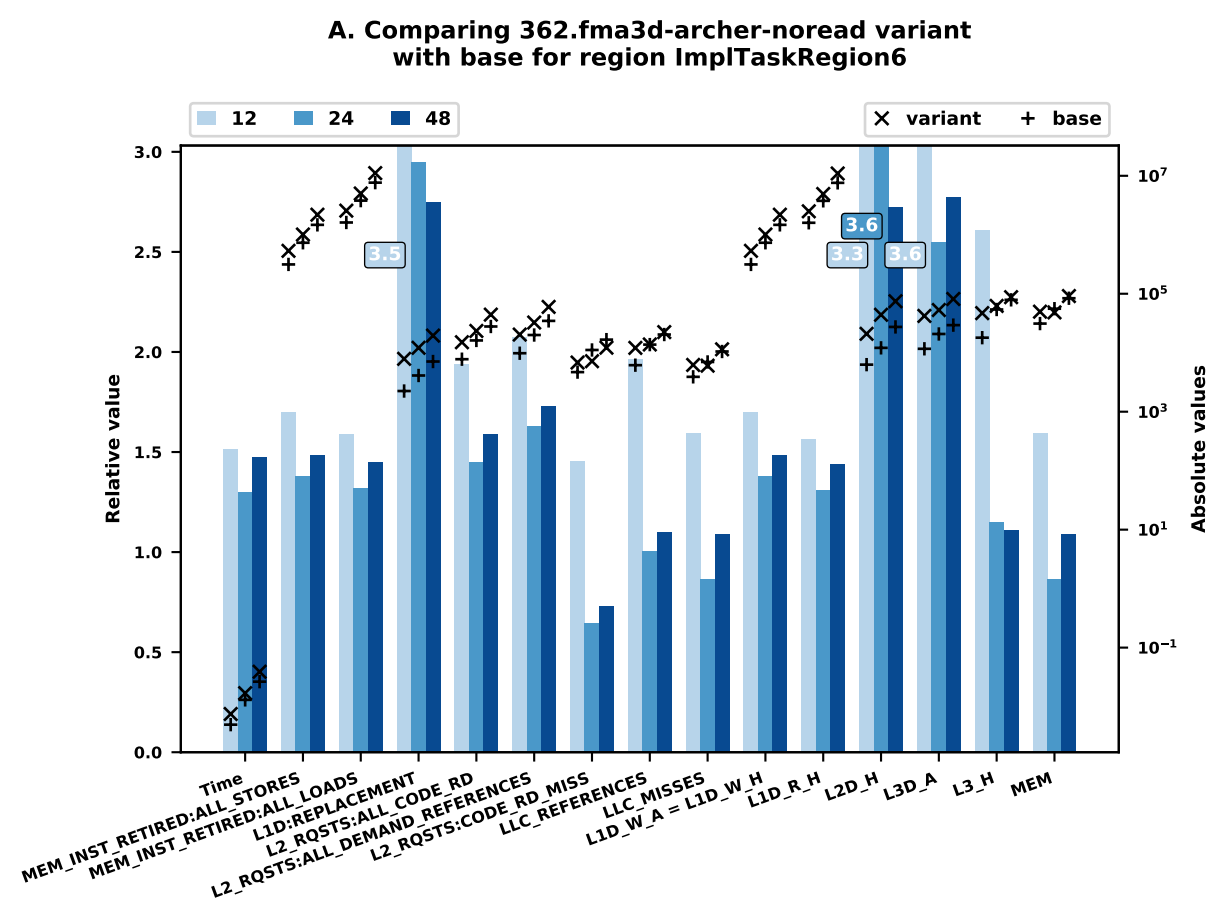

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion5
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
10^2
10^4
10^6
10^8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

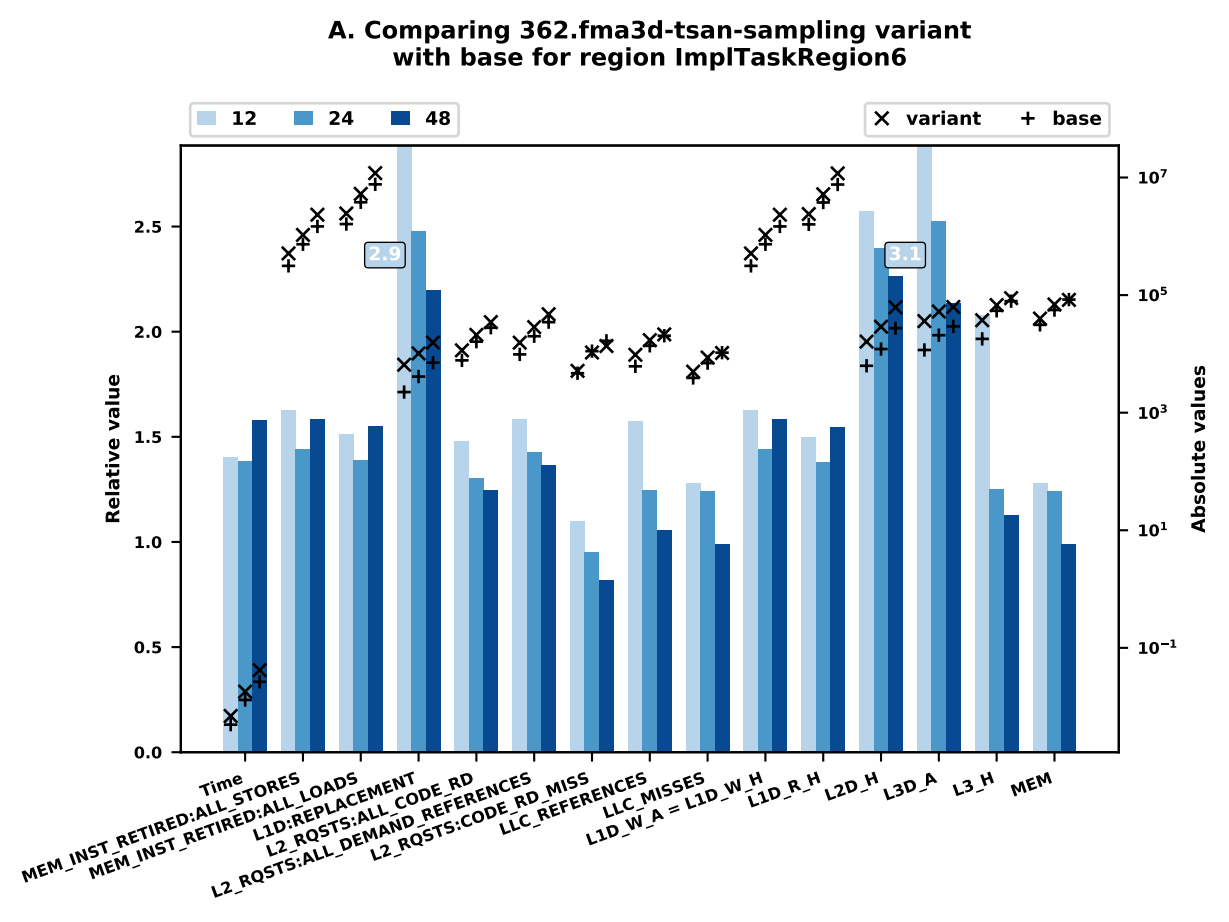

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion5
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
10^2
10^4
10^6
10^8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

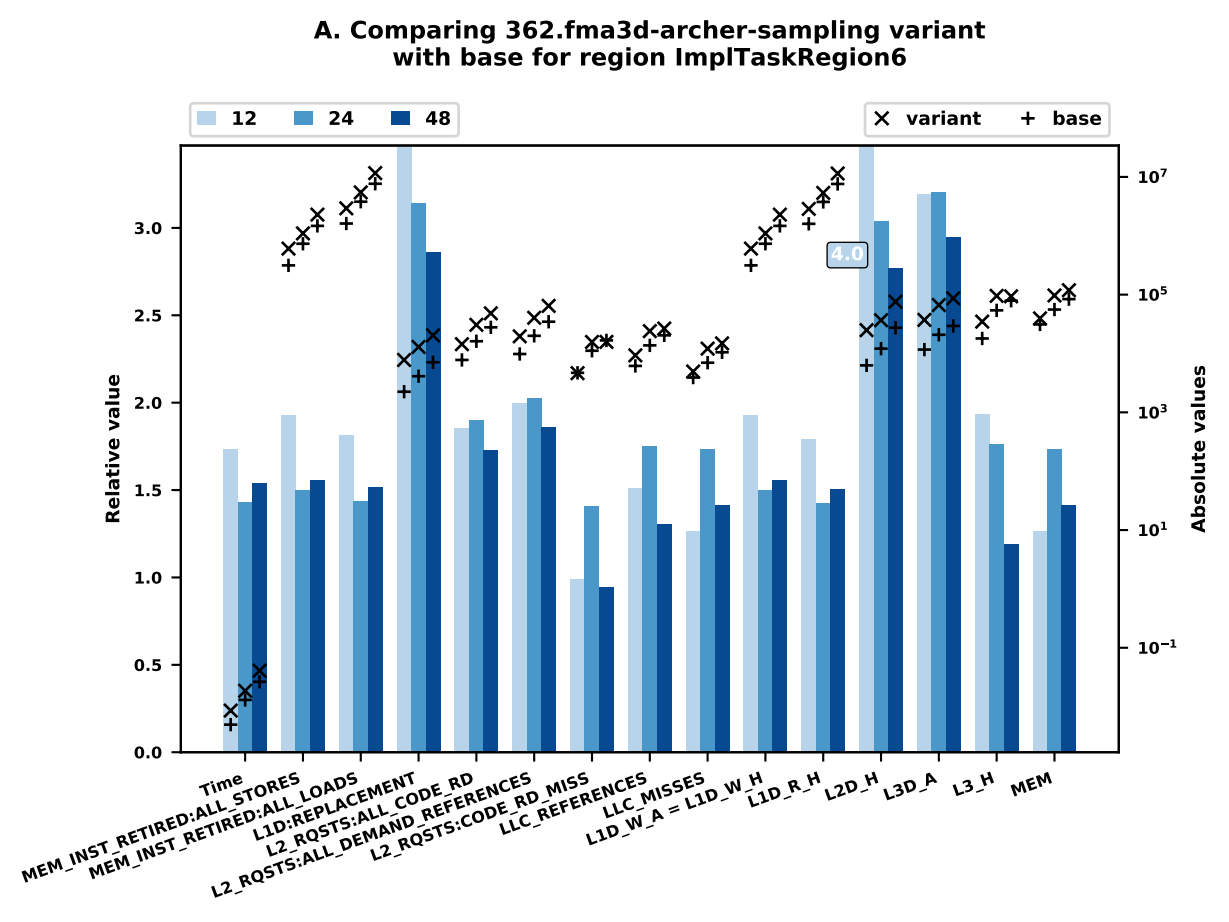

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion5
12
24
48
variant
base
6.8
7.7
Relative value
Absolute values
0
1
2
3
4
5
10^2
10^4
10^6
10^8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

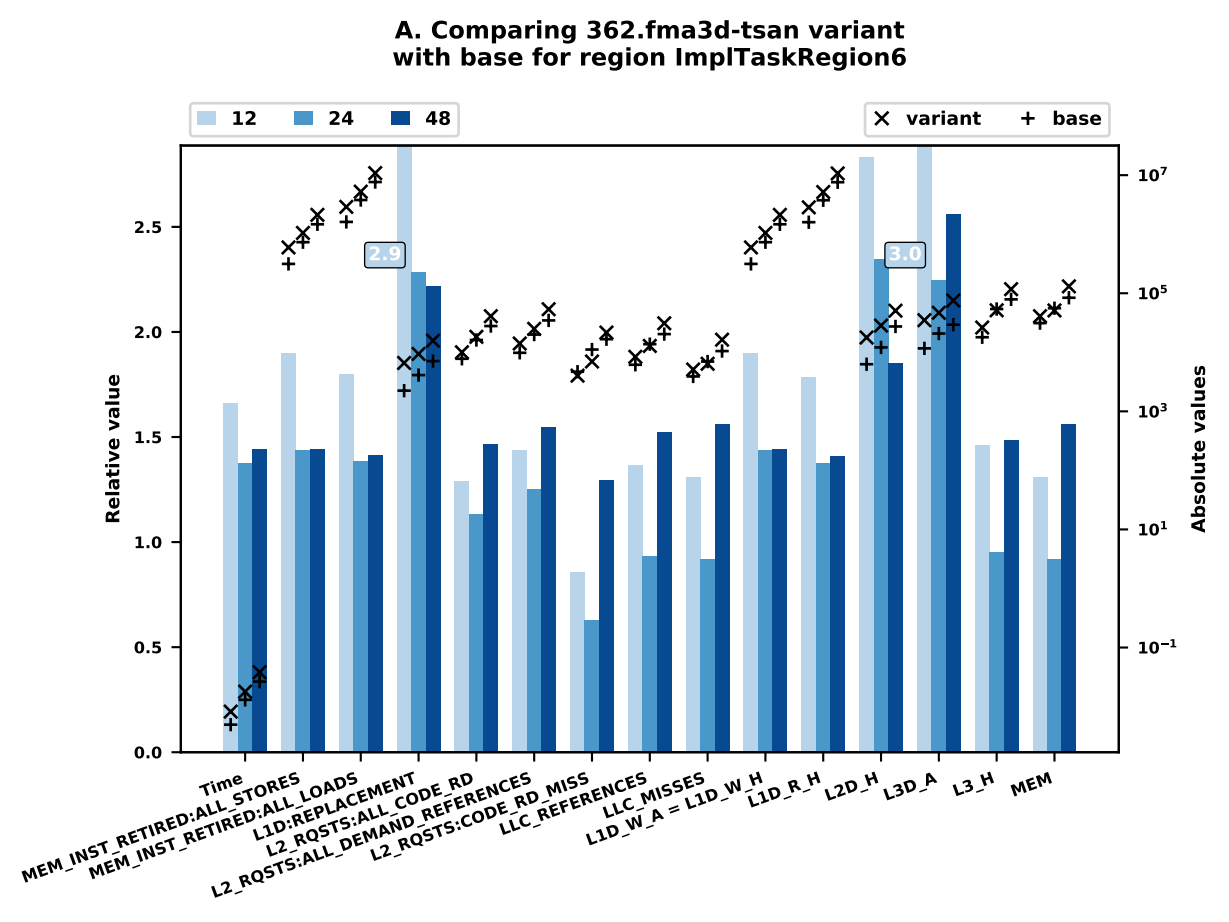

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion5
12
24
48
variant
base
Relative value
Absolute values
5.9
6.4
0
1
2
3
4
5
10^2
10^4
10^6
10^8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

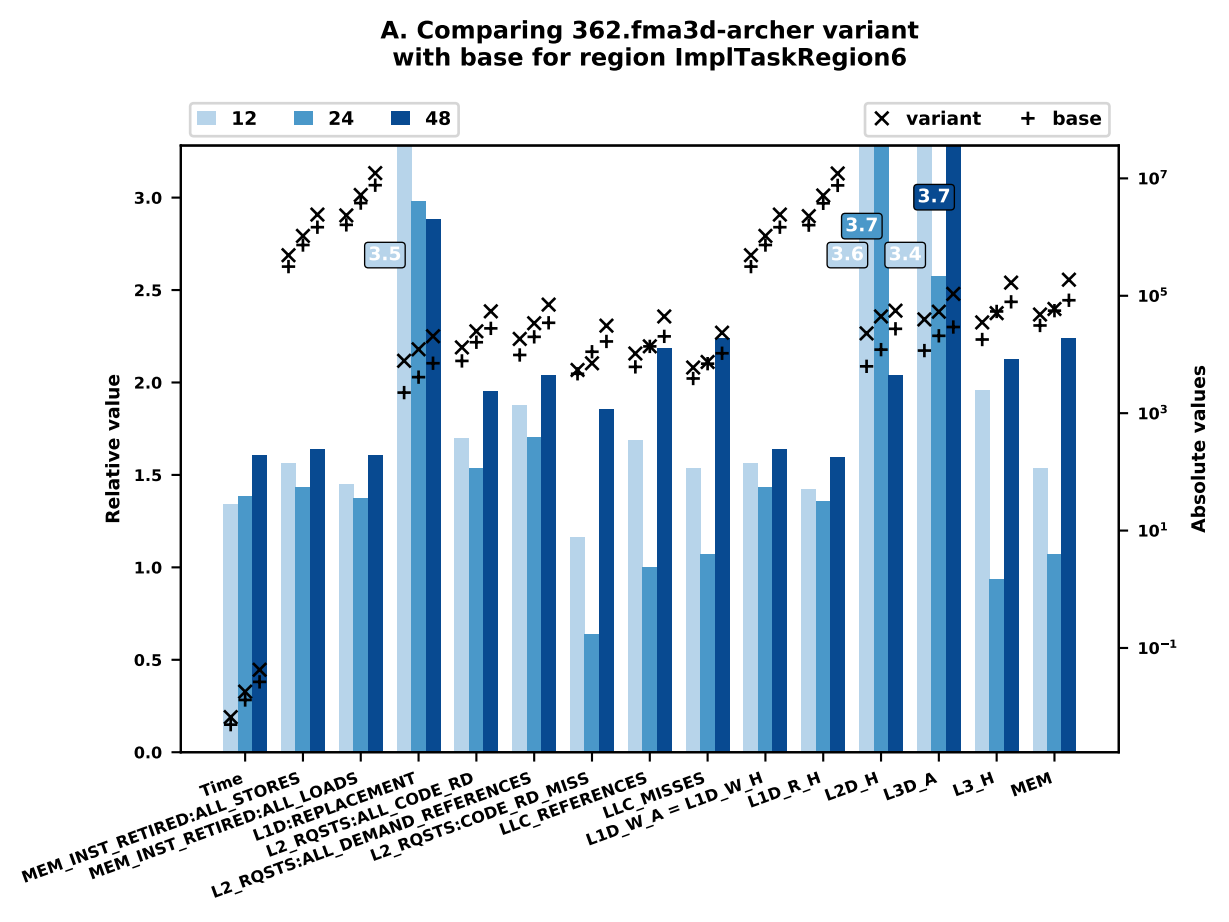

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion6
12
24
48
variant
base
Relative value
Absolute values
3.0
0.0
0.5
1.0
1.5
2.0
2.5
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

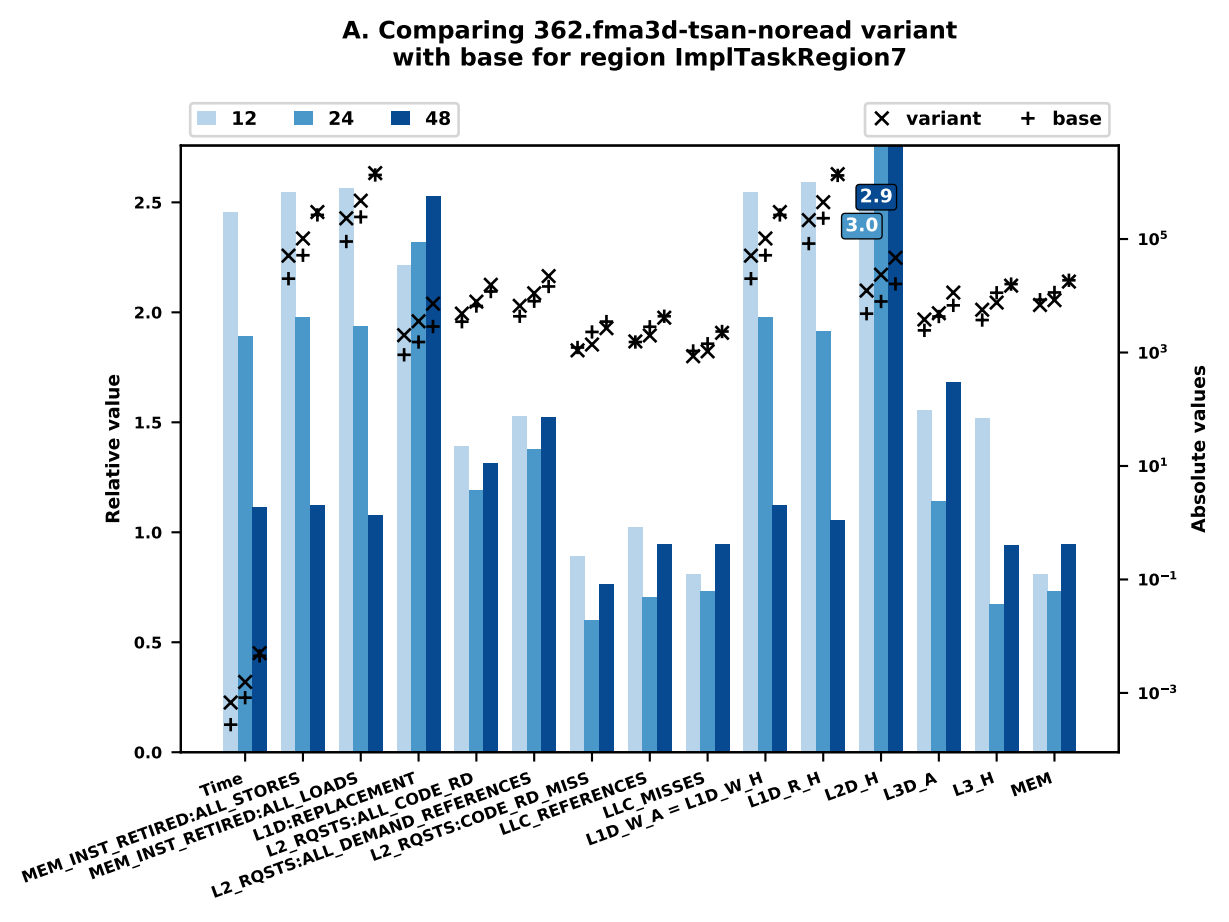

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion6
12
24
48
variant
base
Relative value
Absolute values
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
3.5
3.6
3.3
3.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

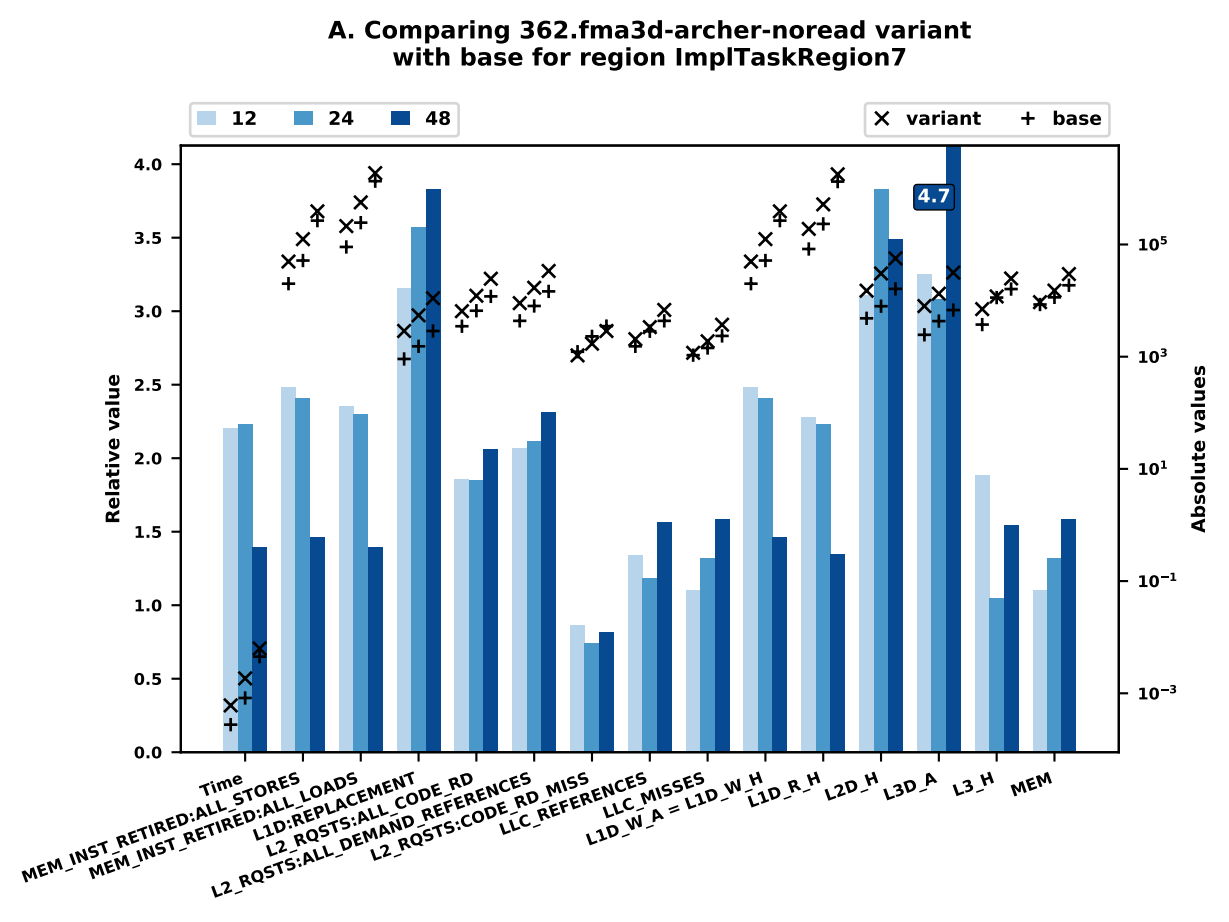

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion6
12
24
48
variant
base
2.9
3.1
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

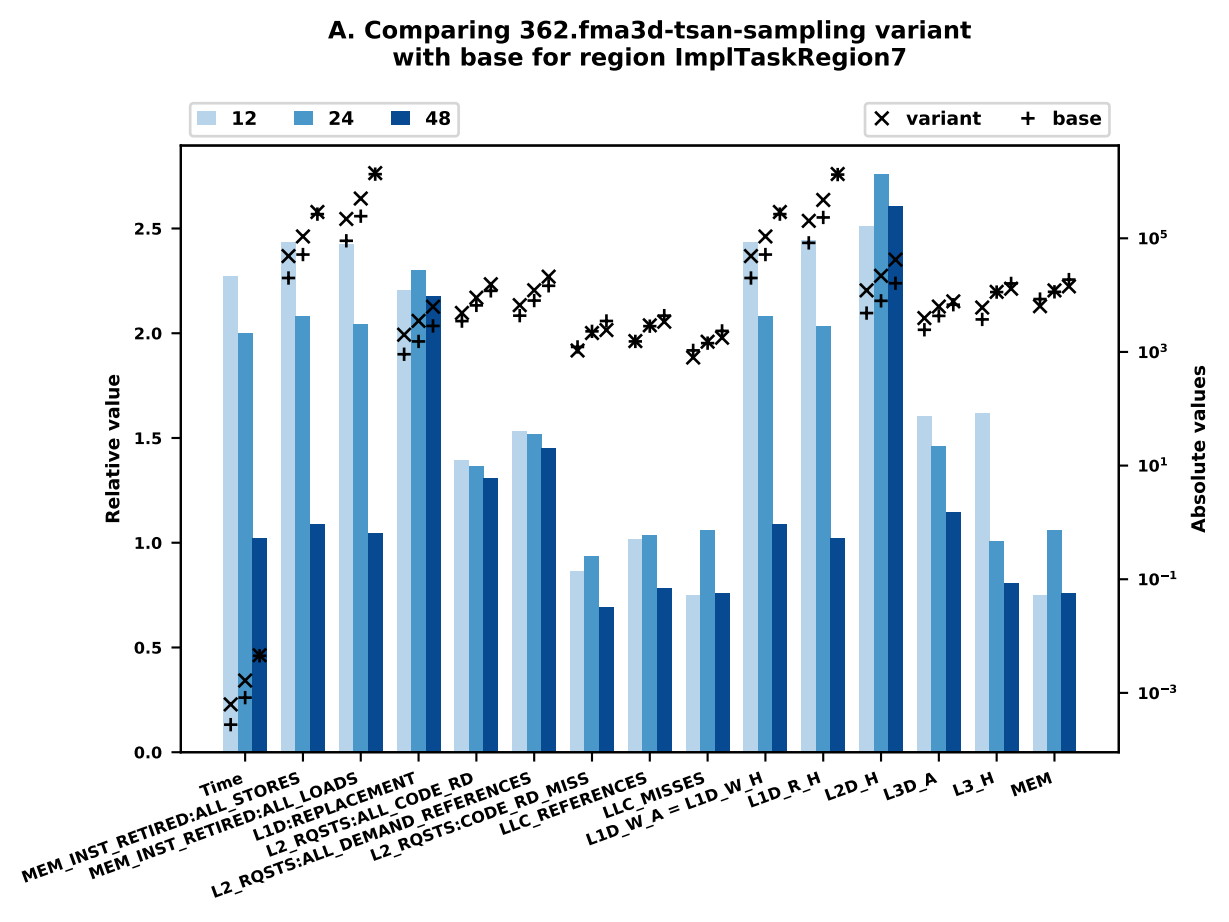

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion6
12
24
48
variant
base
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
4.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

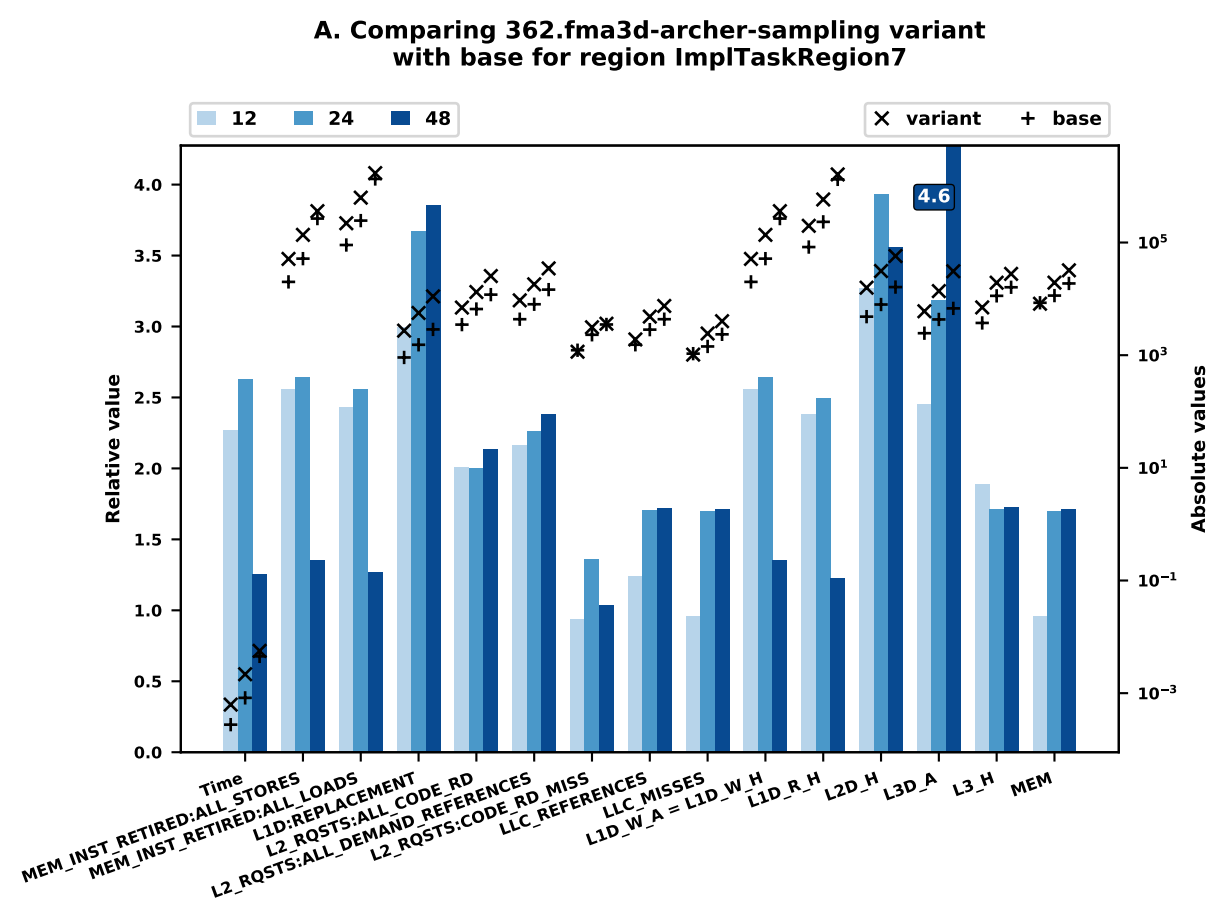

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion6
12
24
48
variant
base
Relative value
Absolute values
2.9
3.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

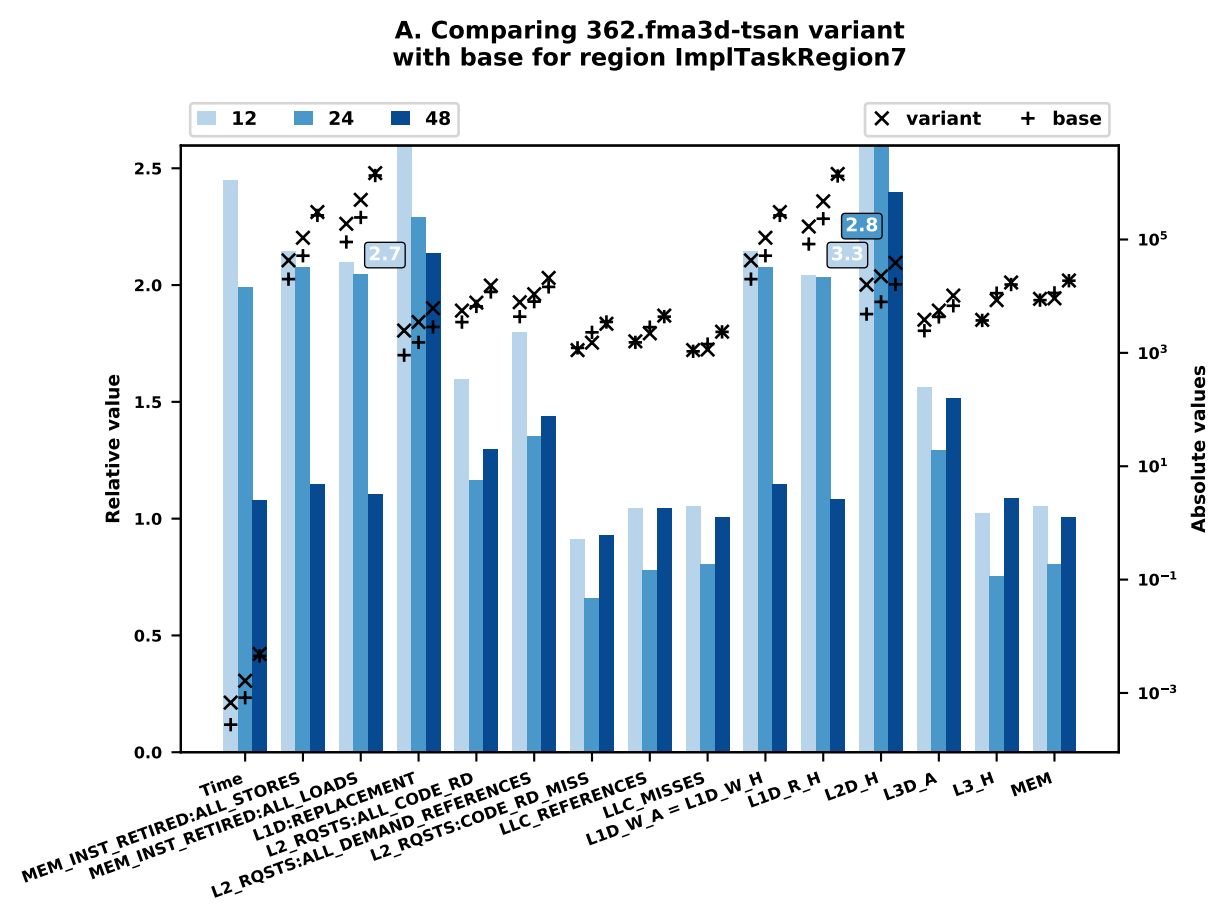

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion6
12
24
48
variant
base
Relative value
Absolute values
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
3.5
3.7
3.6
3.7
3.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

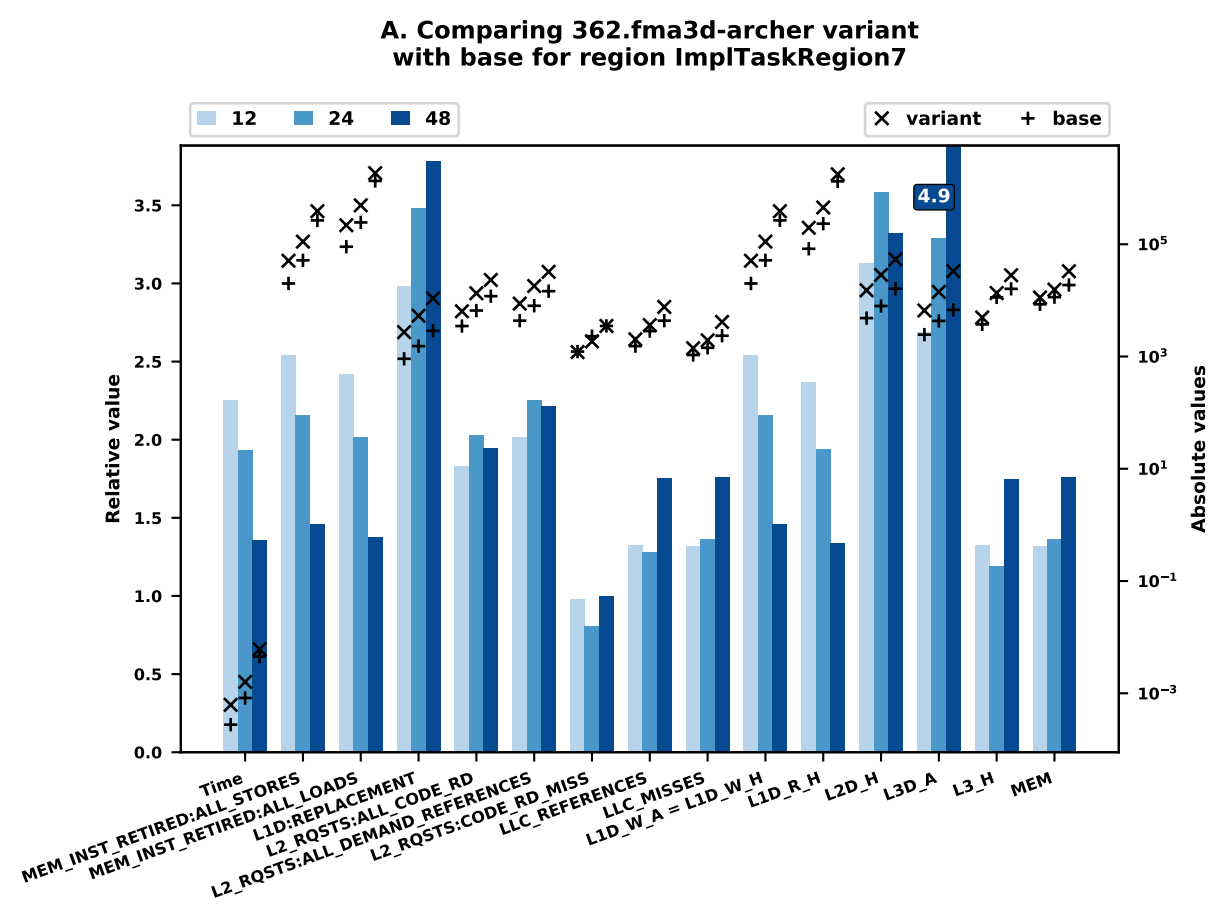

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion7
12
24
48
variant
base
Relative value
Absolute values
2.9
3.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

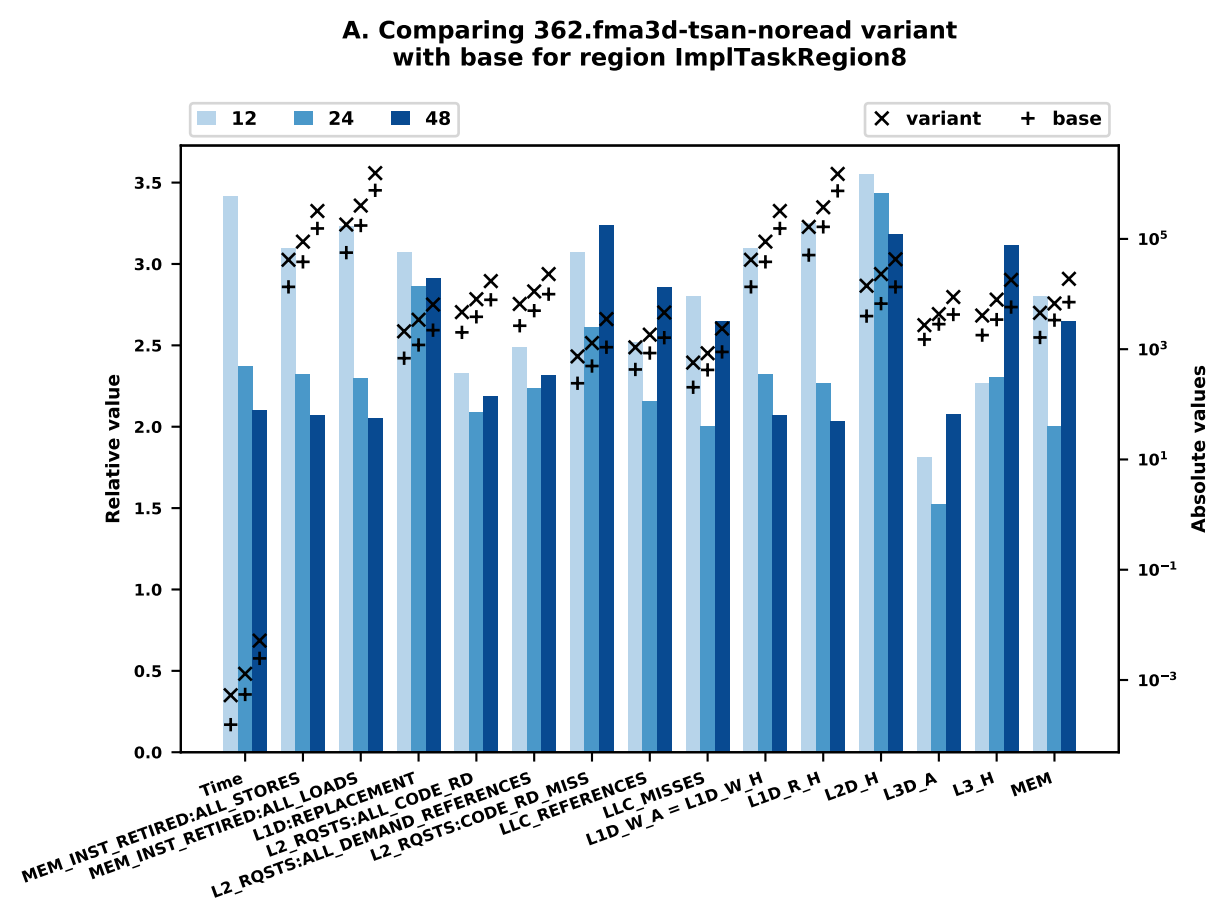

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion7
12
24
48
variant
base
4.7
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

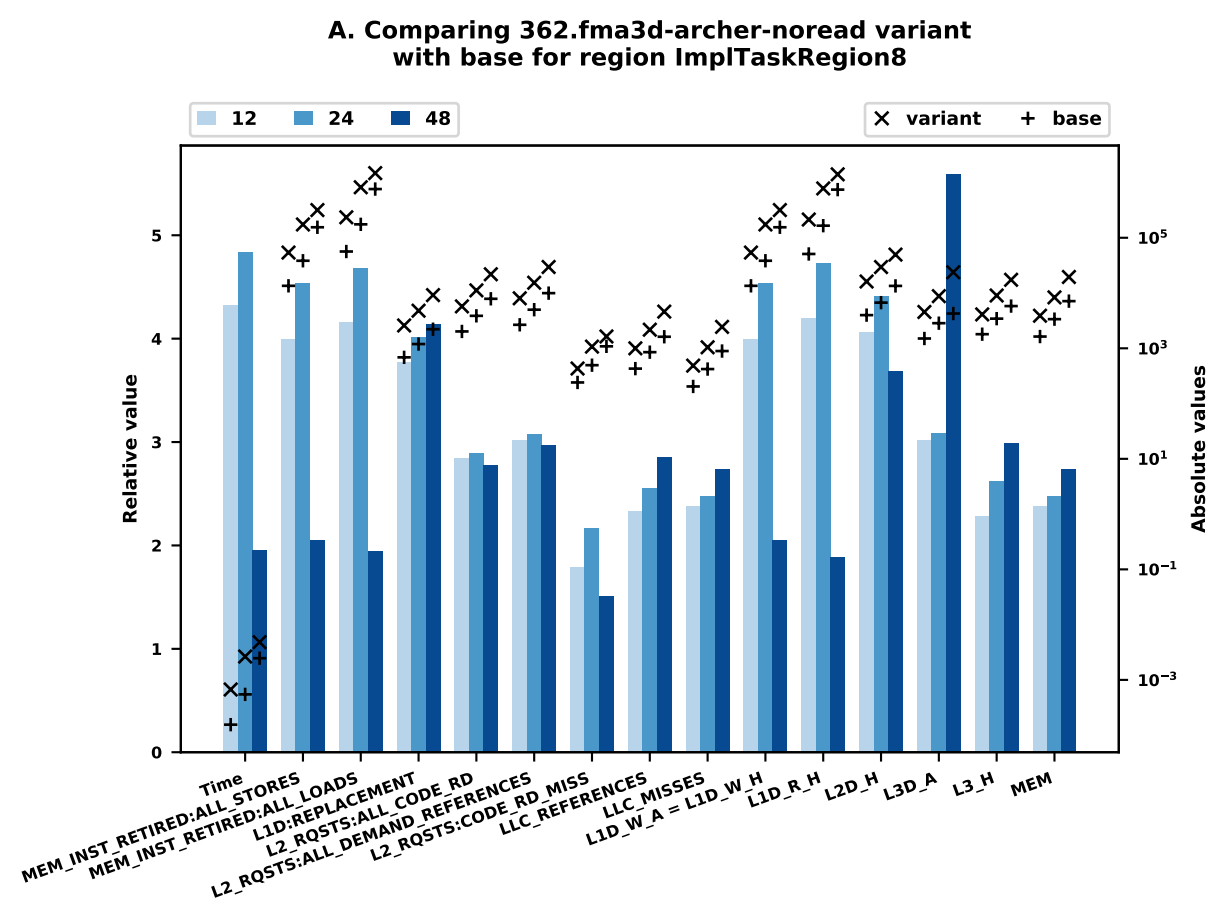

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion7
12
24
48
variant
base
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

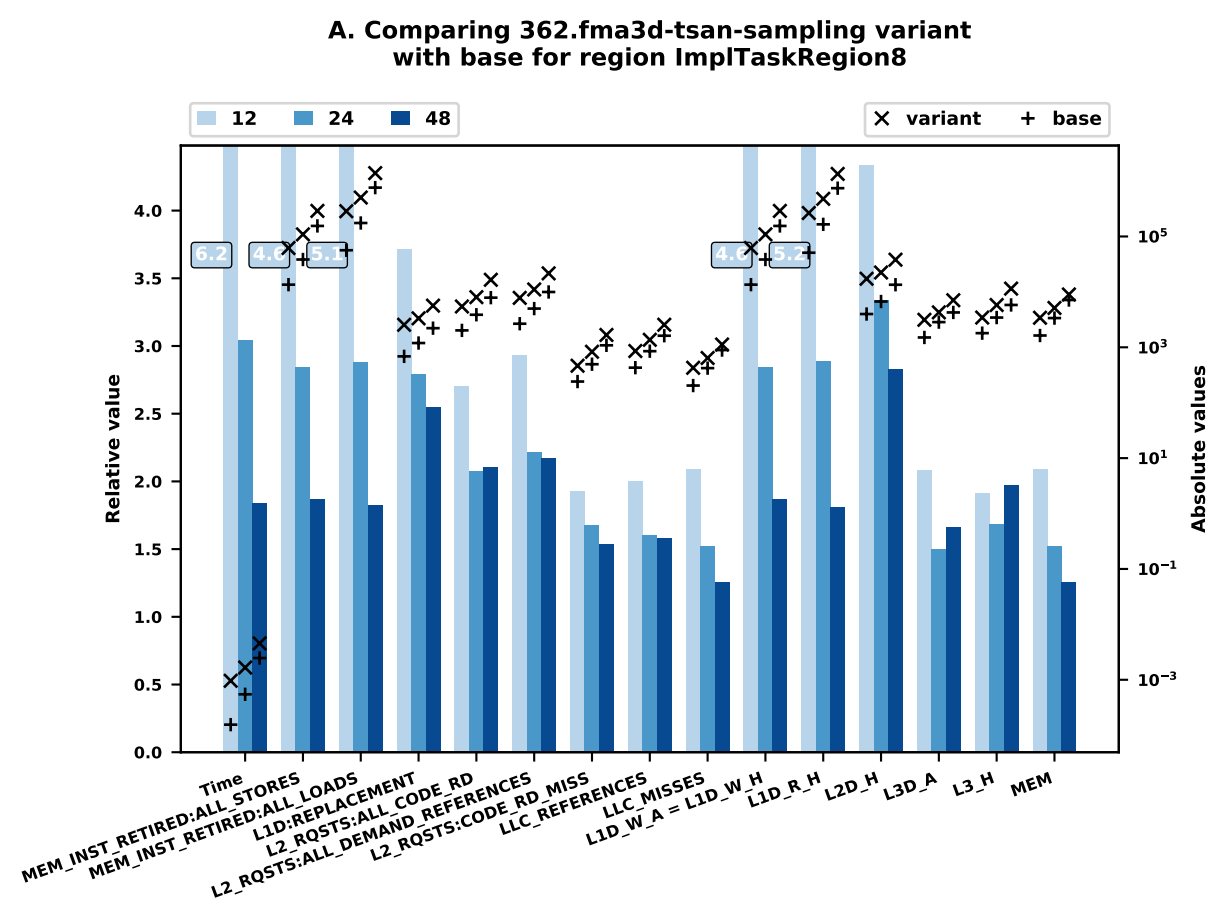

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion7
12
24
48
variant
base
4.6
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

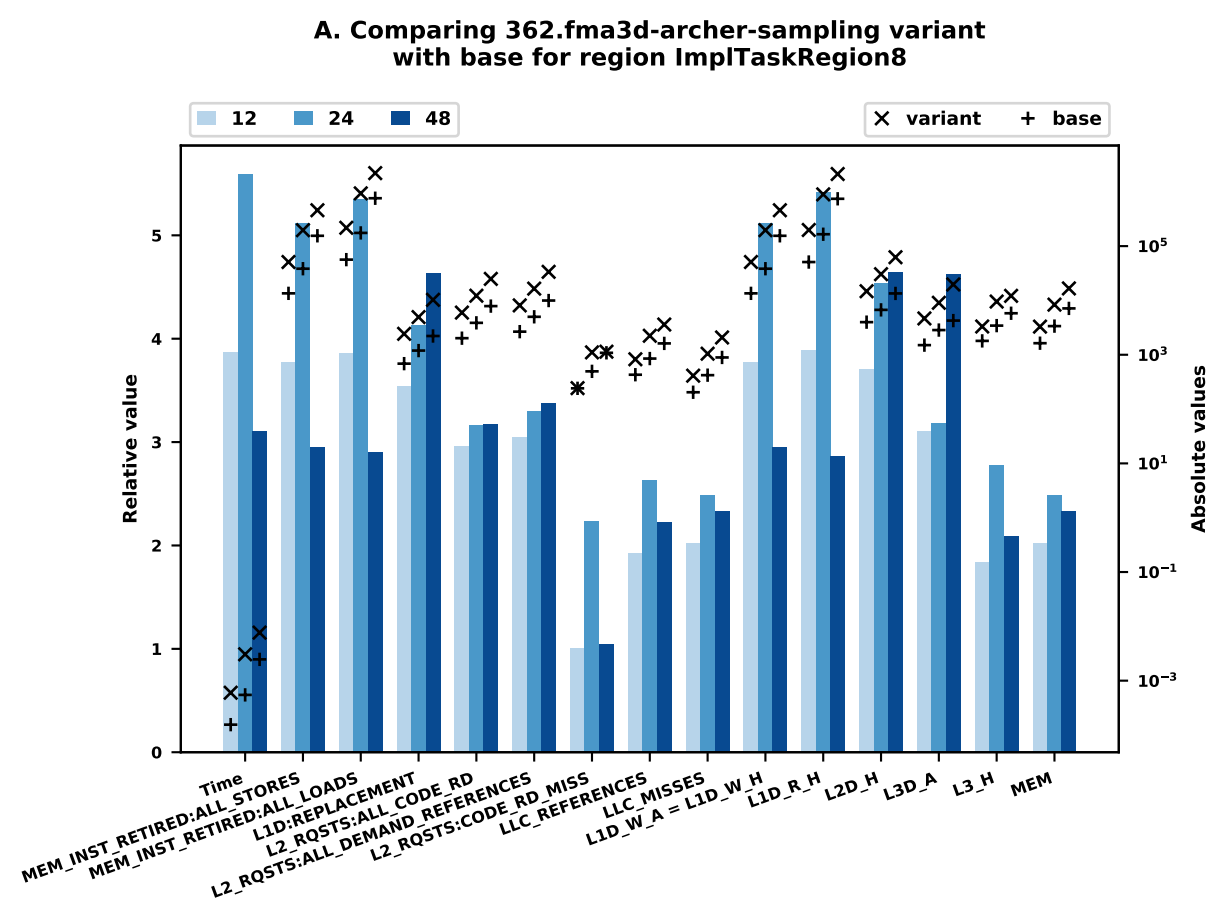

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion7
12
24
48
variant
base
Relative value
Absolute values
2.7
2.8
3.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

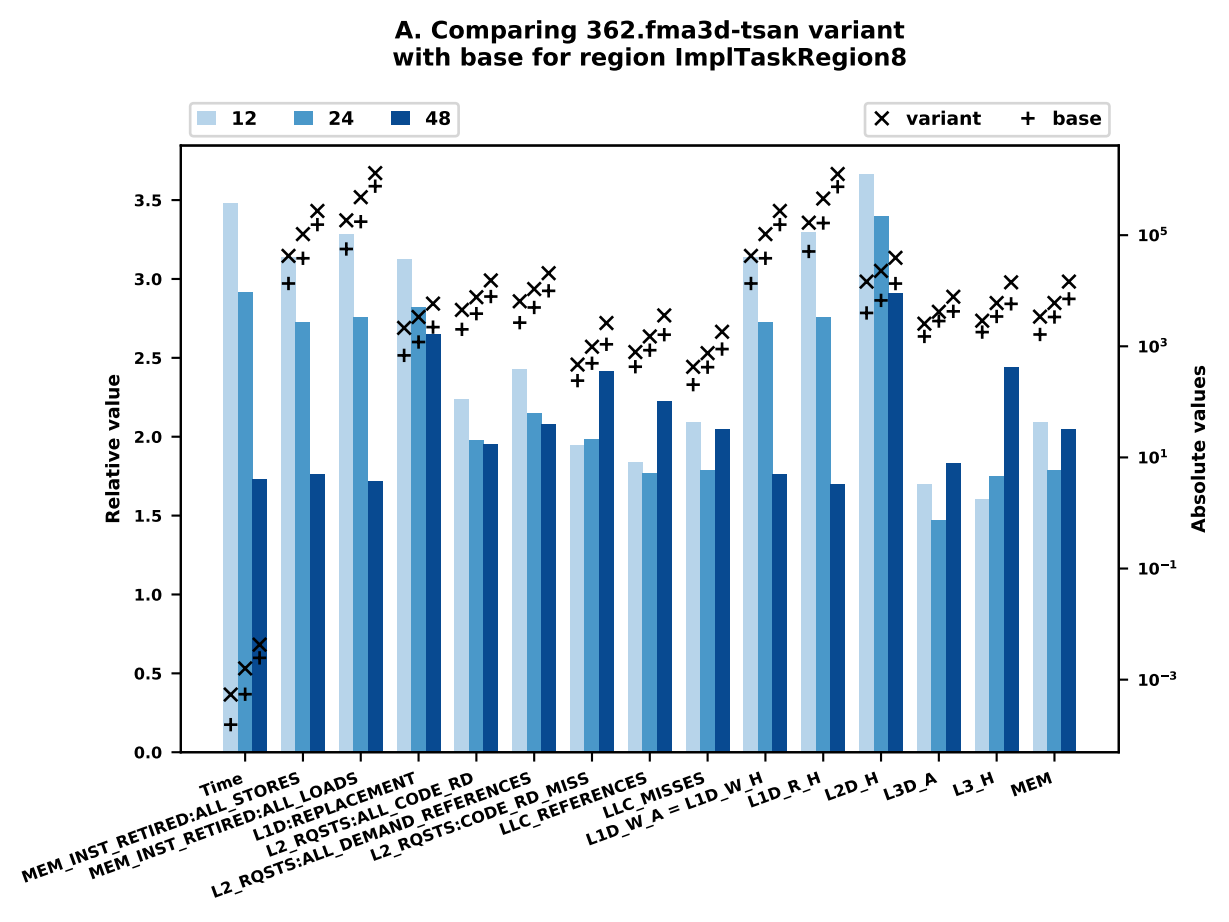

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion7
12
24
48
variant
base
4.9
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

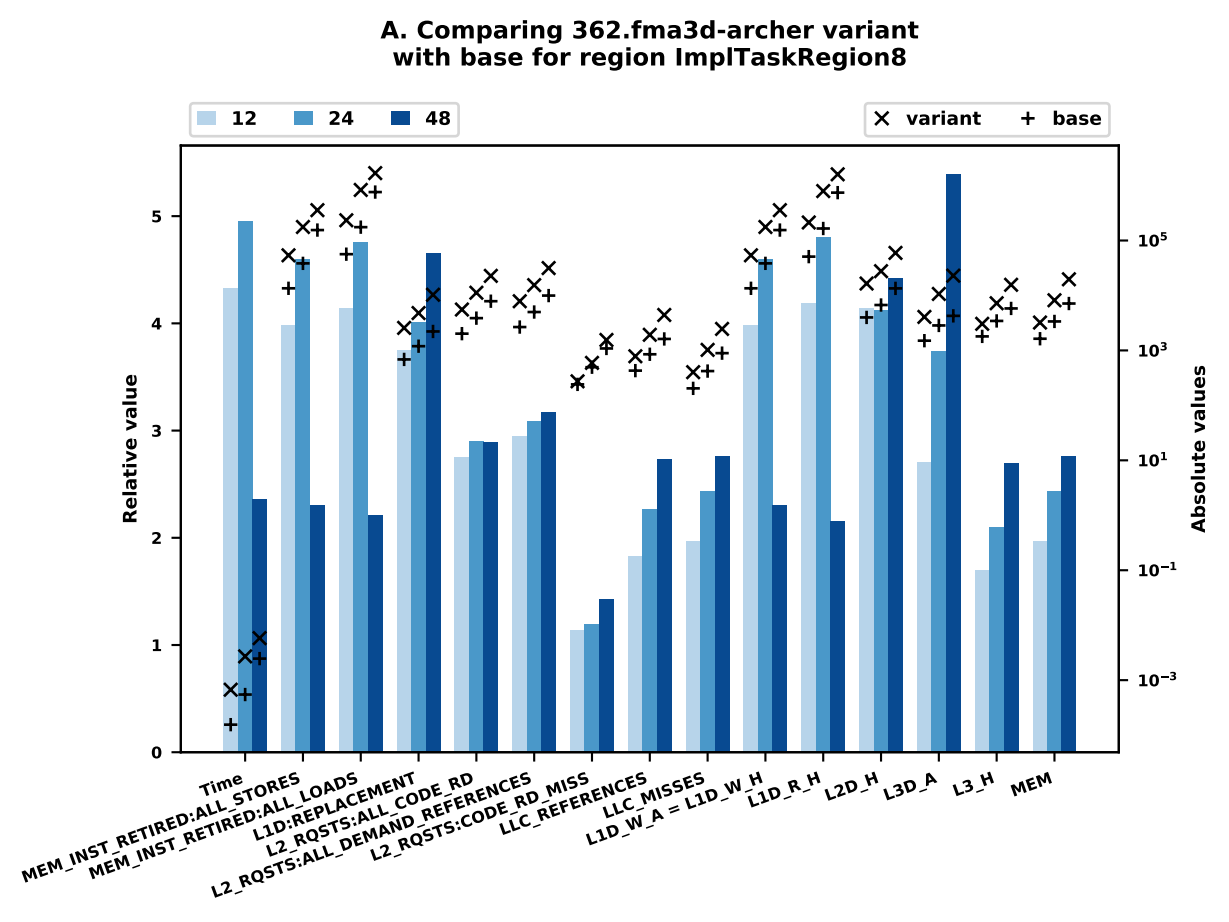

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion8
12
24
48
variant
base
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

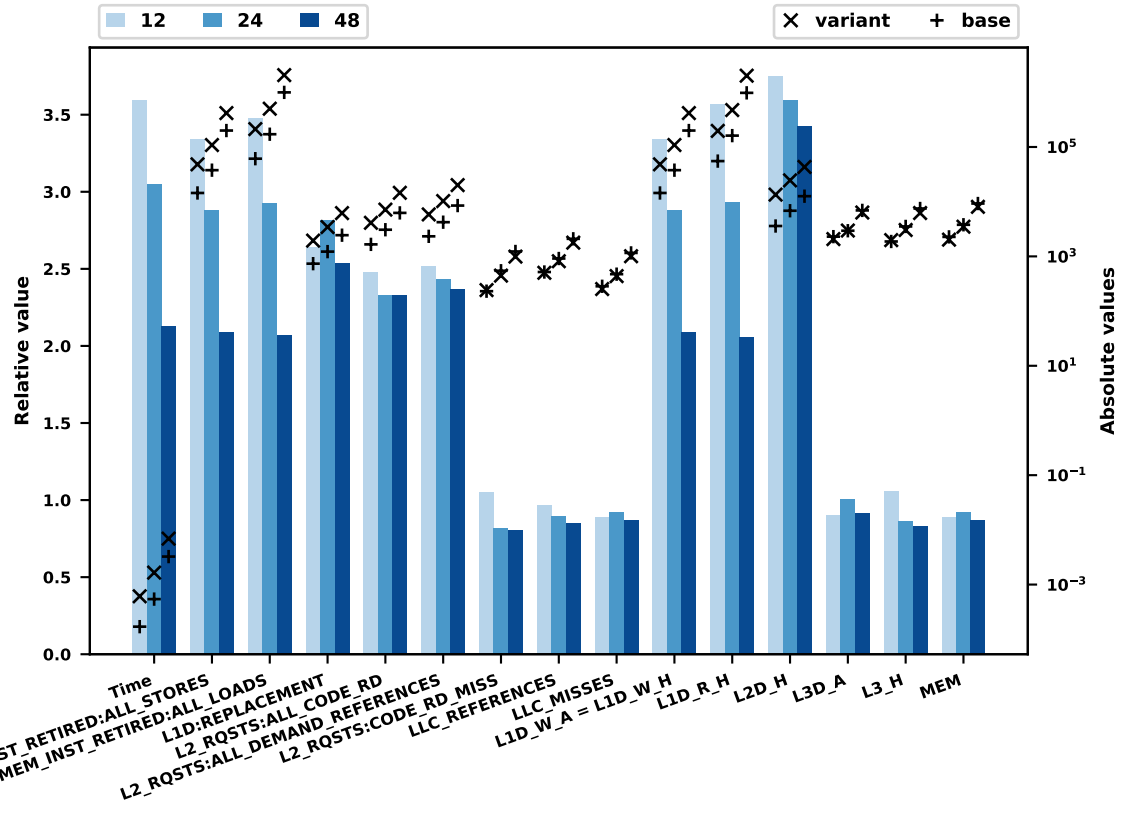

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion8
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

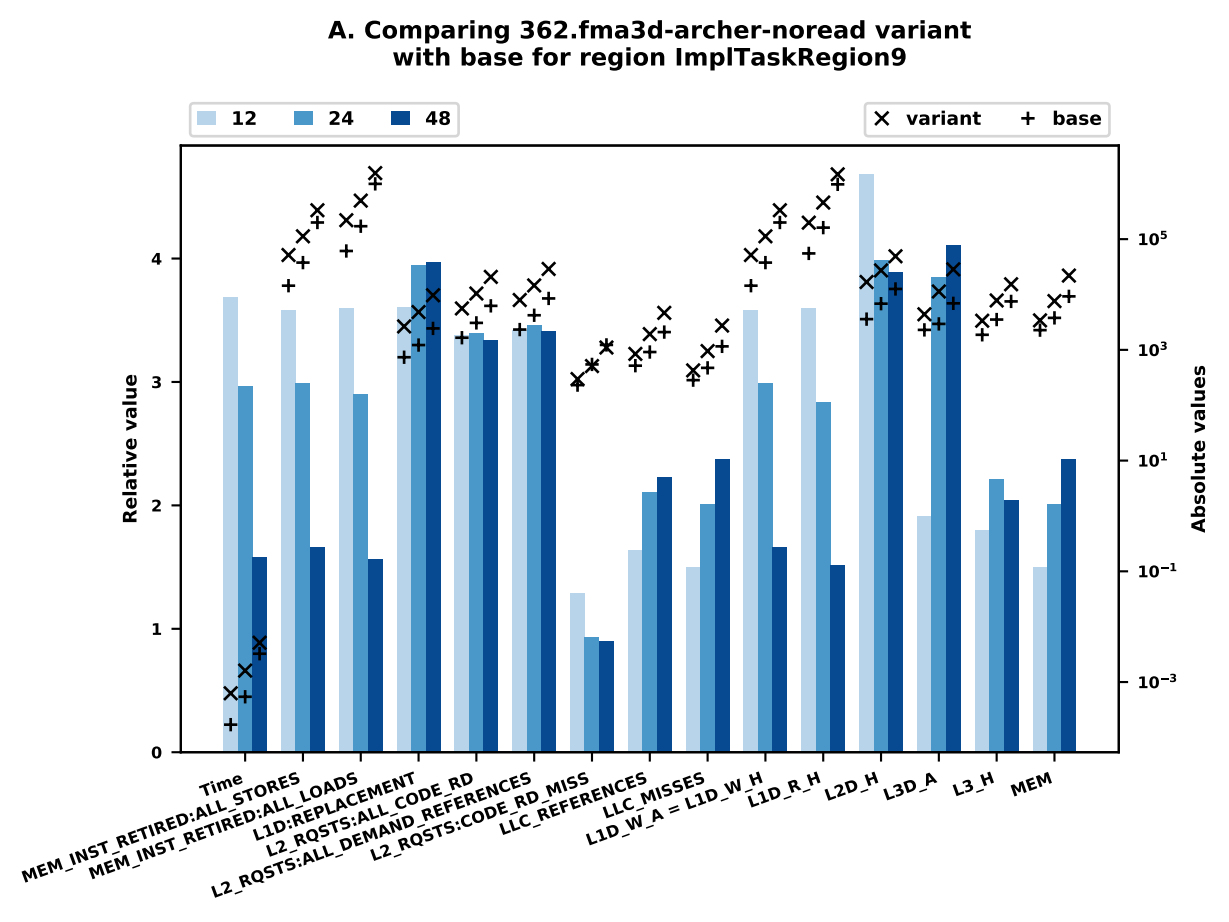

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion8
12
24
48
variant
base
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
6.2
4.6
5.2
4.6
5.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

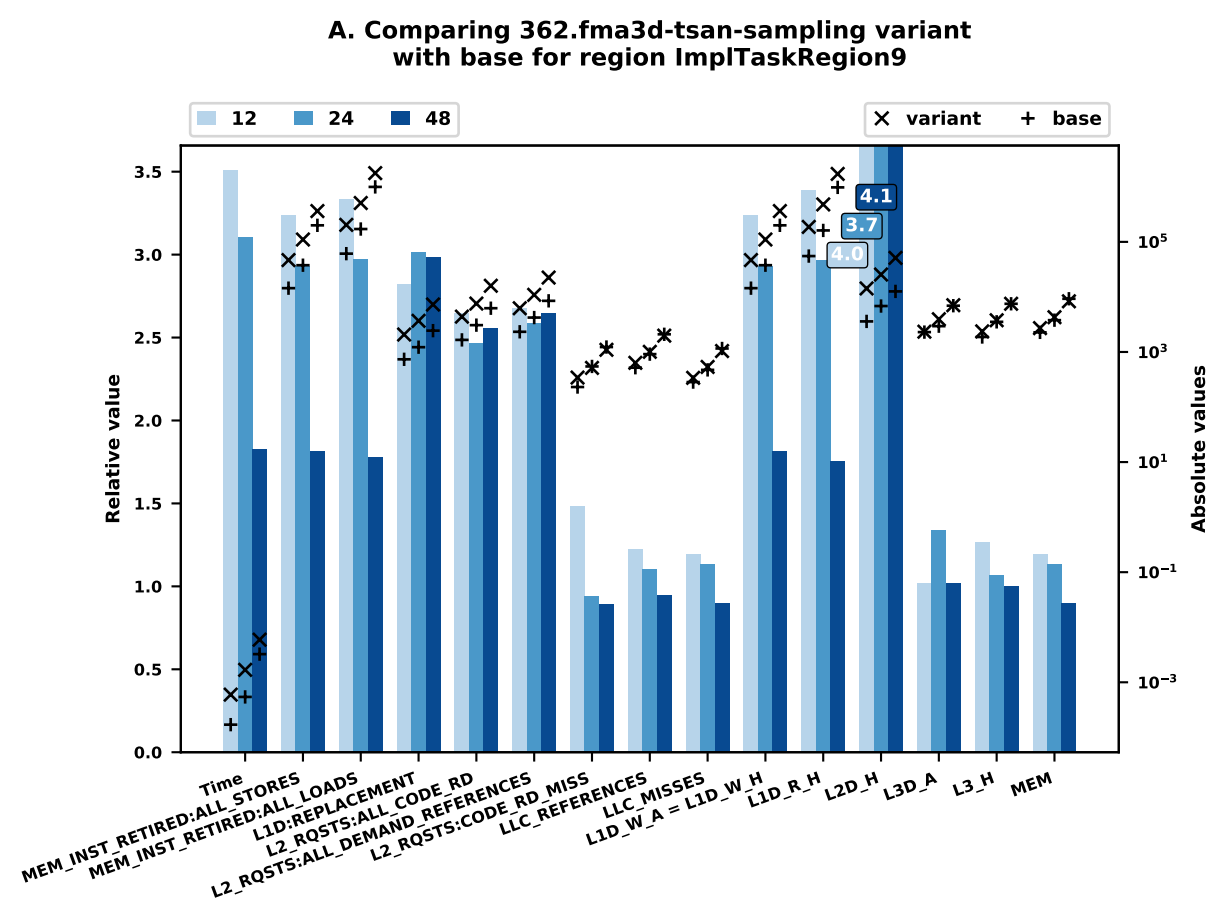

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion8
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

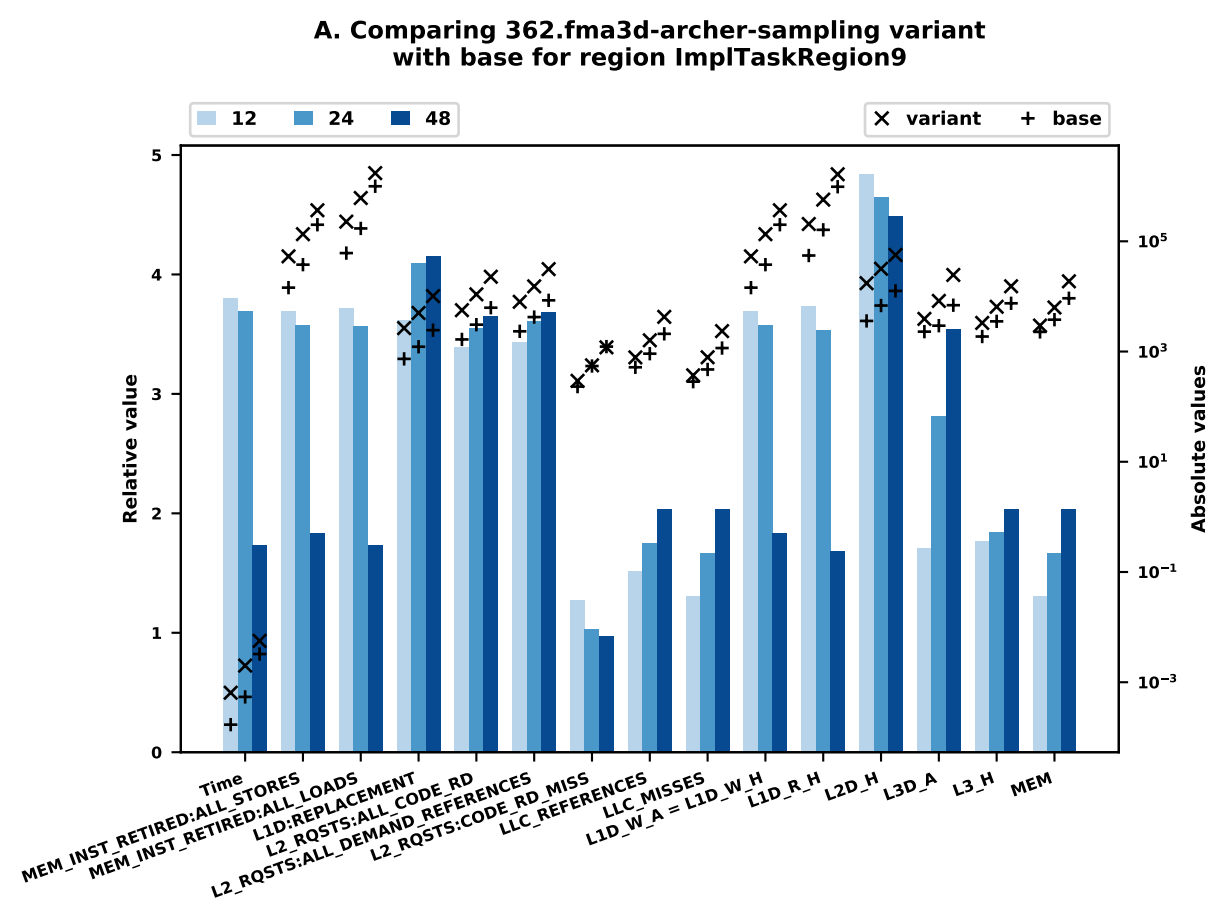

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion8
12
24
48
variant
base
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

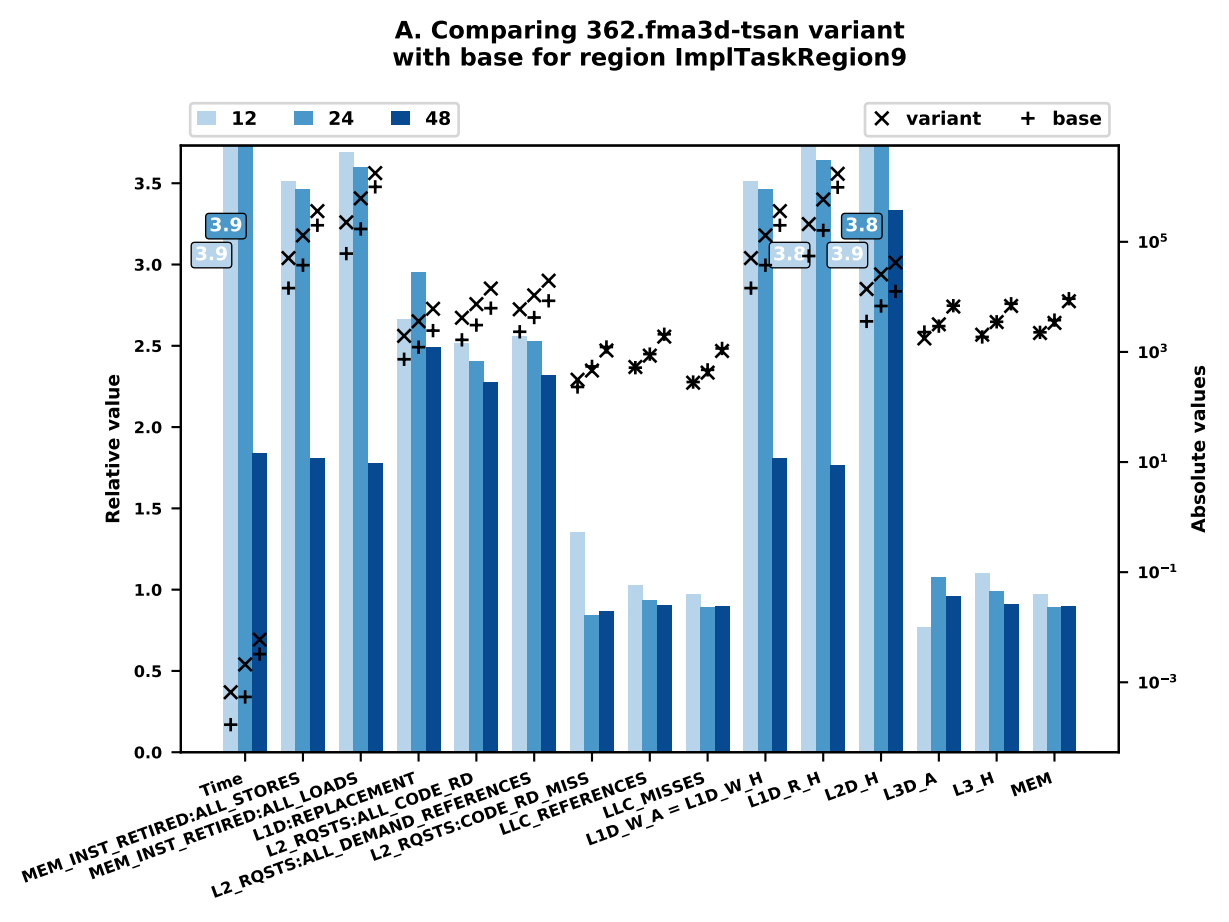

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion8
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

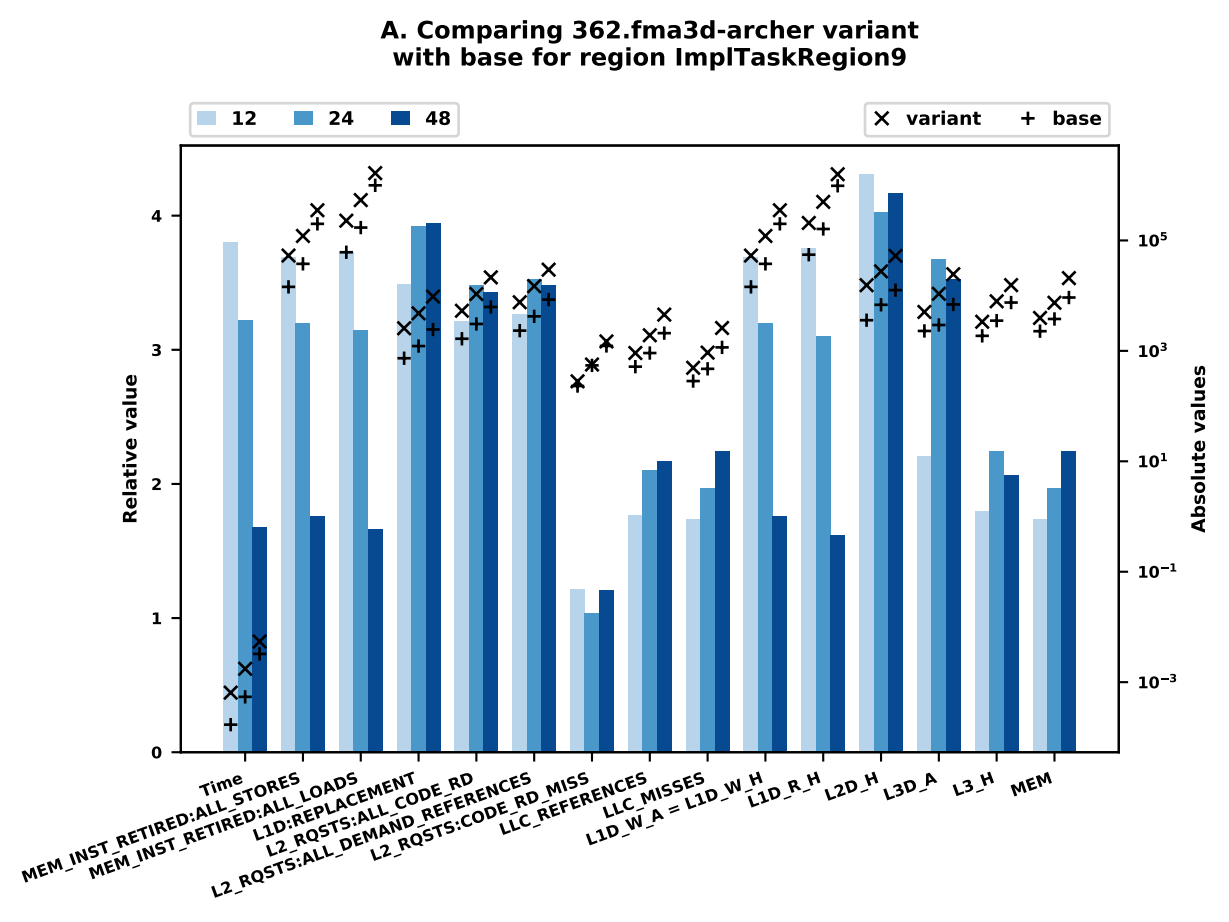

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion9
12
24
48
variant
base
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

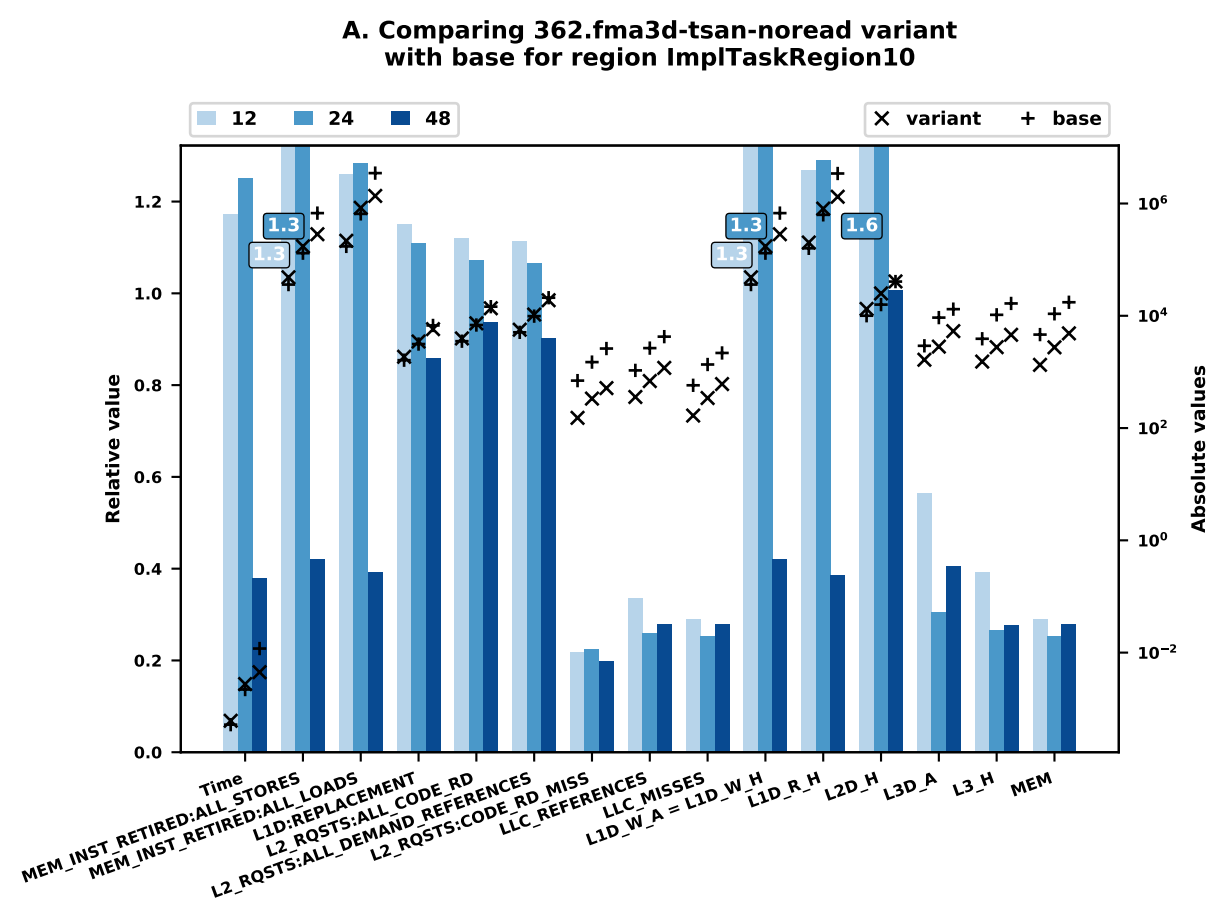

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion9
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

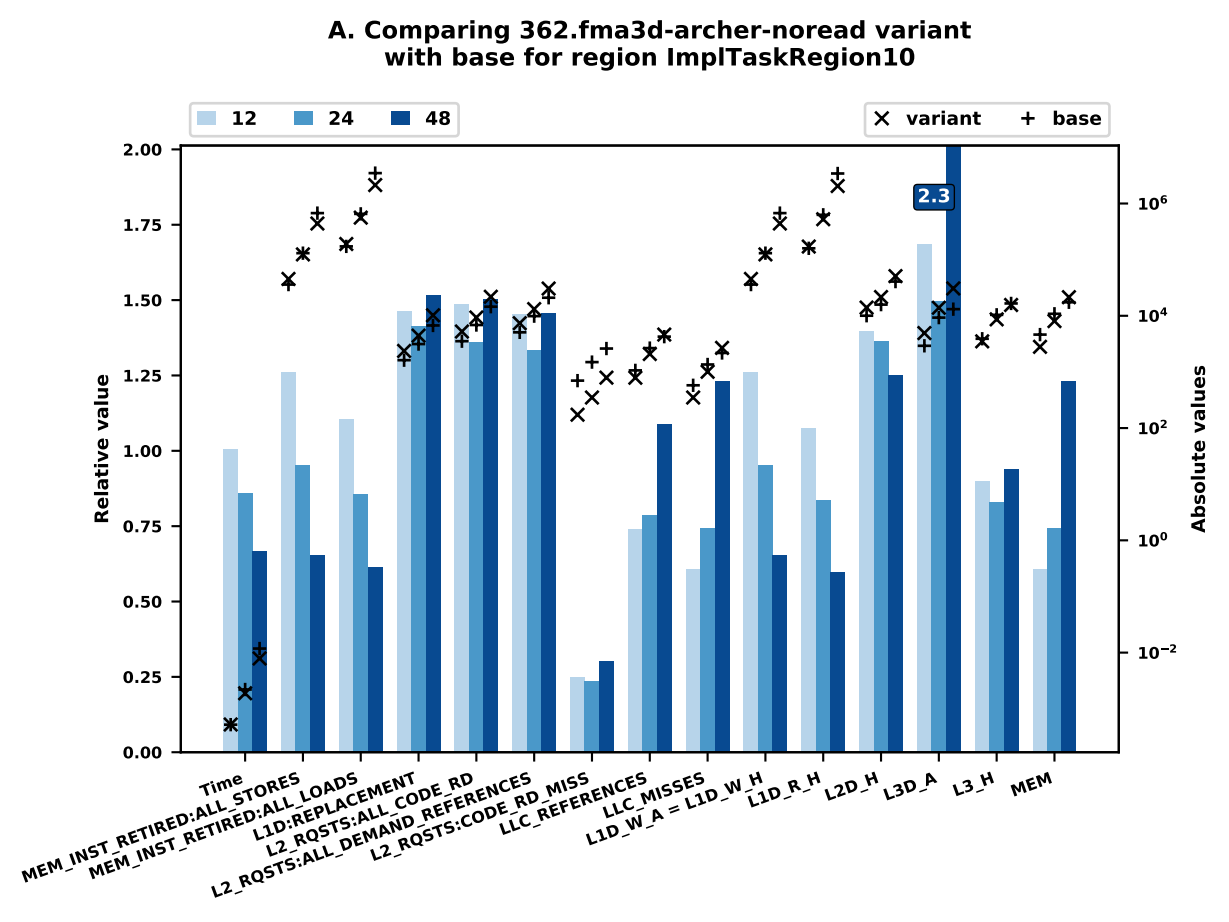

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion9
12
24
48
variant
base
Relative value
Absolute values
4.1
3.7
4.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

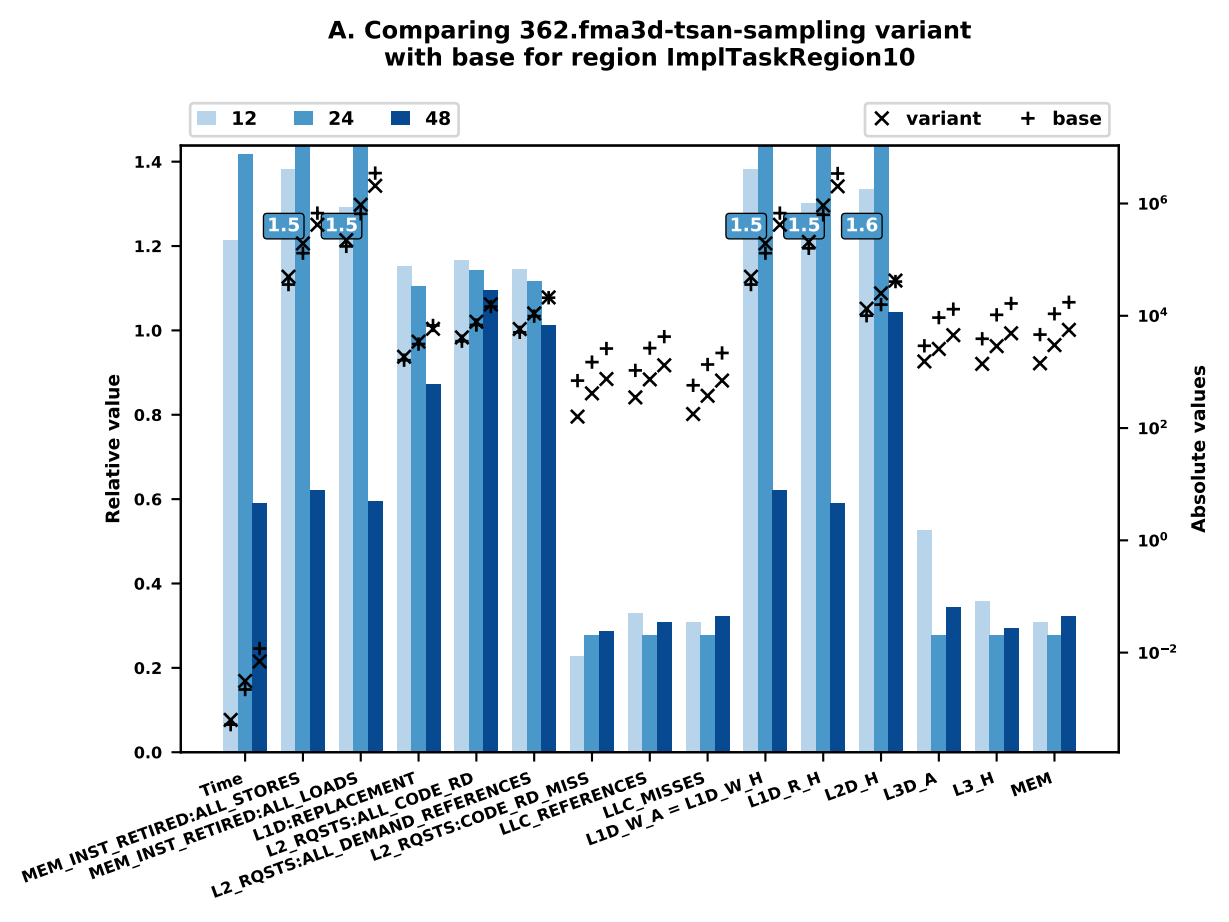

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion9
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

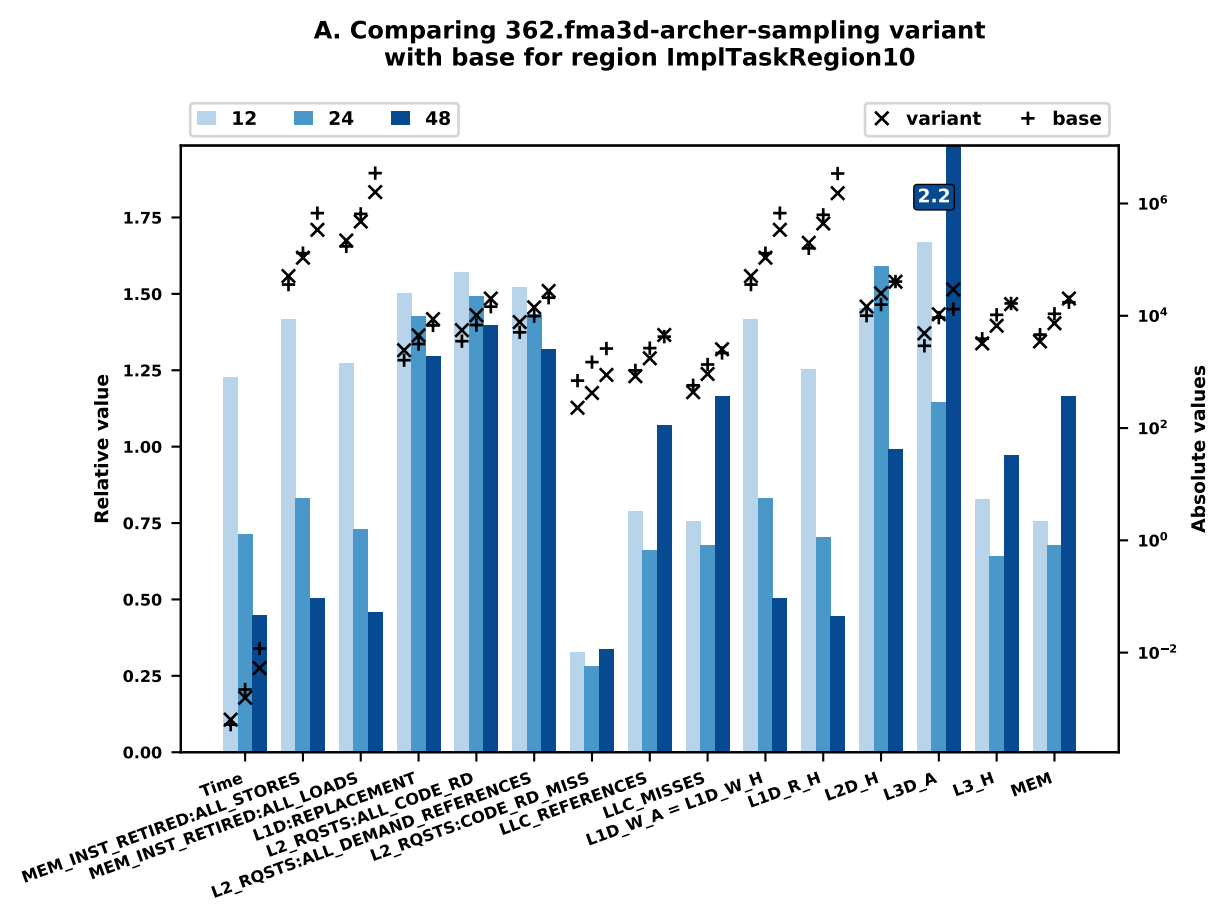

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion9
12
24
48
variant
base
3.9
3.9
3.8
3.8
3.9
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

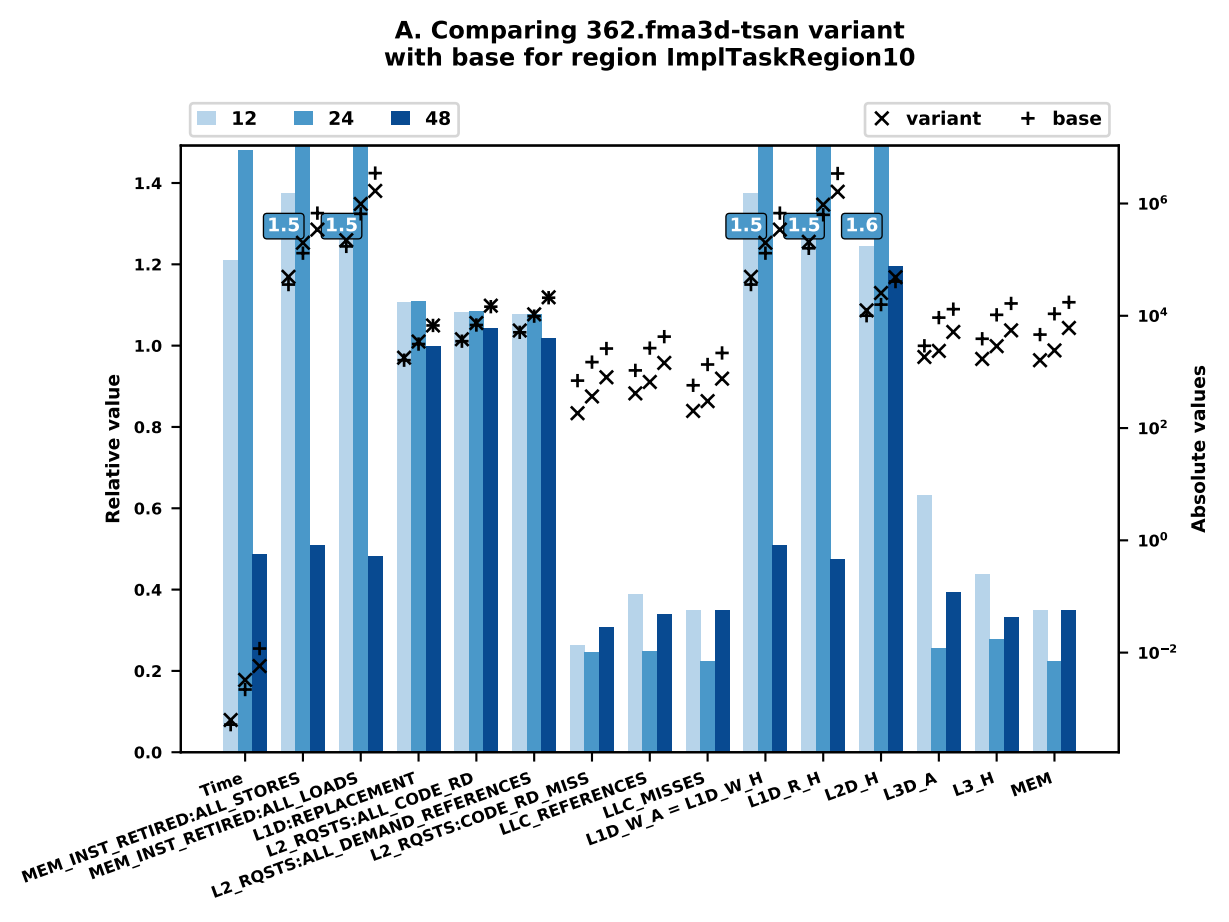

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion9
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

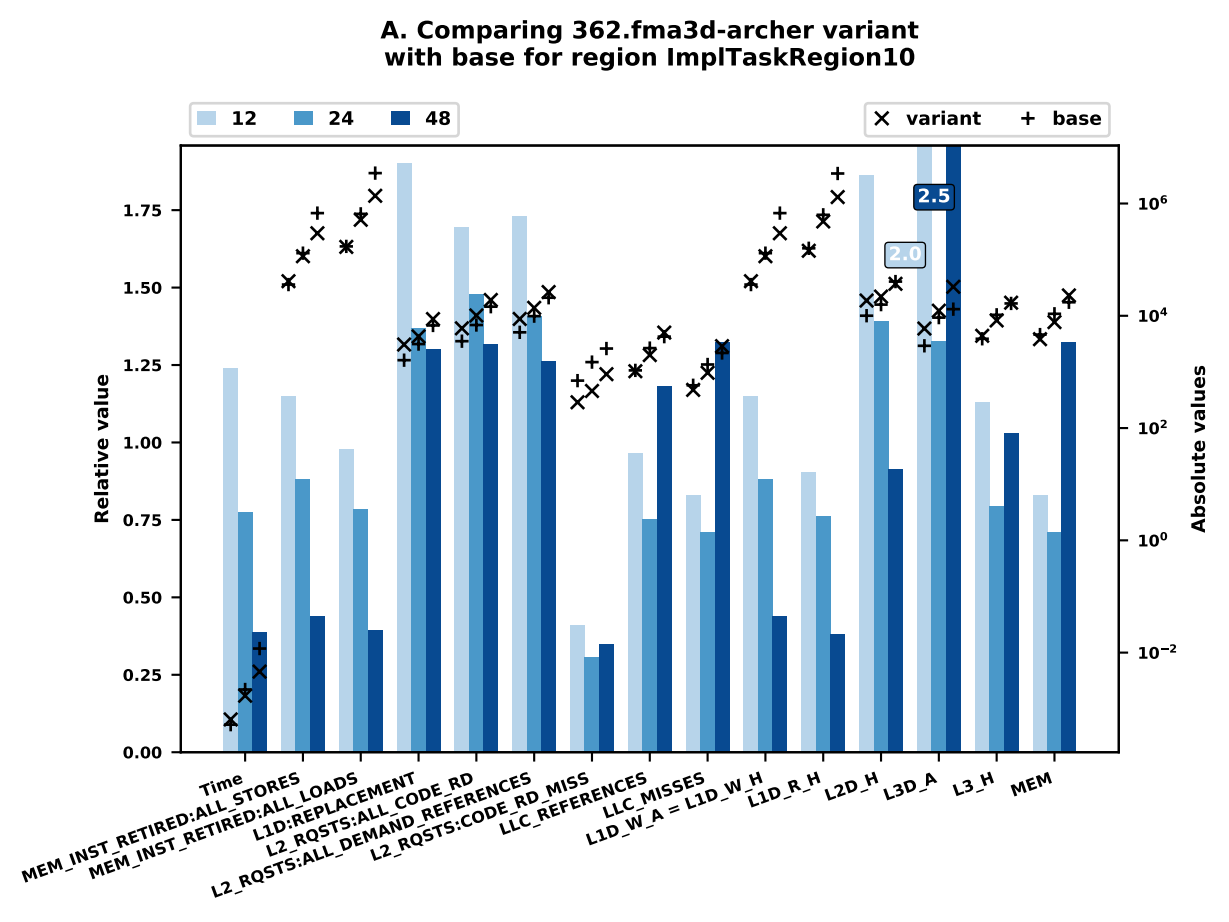

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion10
12
24
48
variant
base
1.3
1.3
1.3
1.3
1.6
Relative value
Absolute values
0.0
0.2
0.4
0.6
0.8
1.0
1.2
10^{-2}
10^{0}
10^{2}
10^{4}
10^{6}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

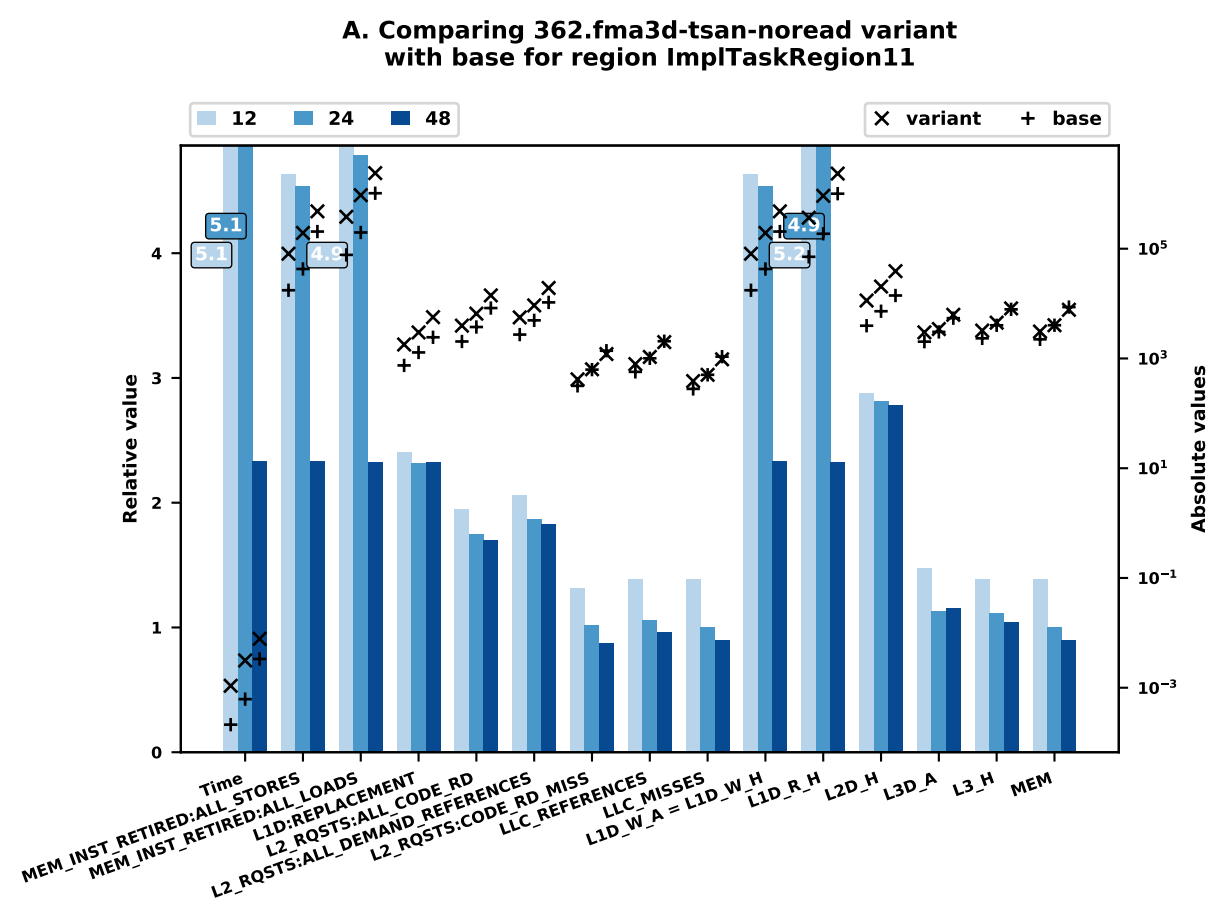

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion10
12
24
48
variant
base
2.3
Relative value
Absolute values
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
10^{6}
10^{4}
10^{2}
10^{0}
10^{-2}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

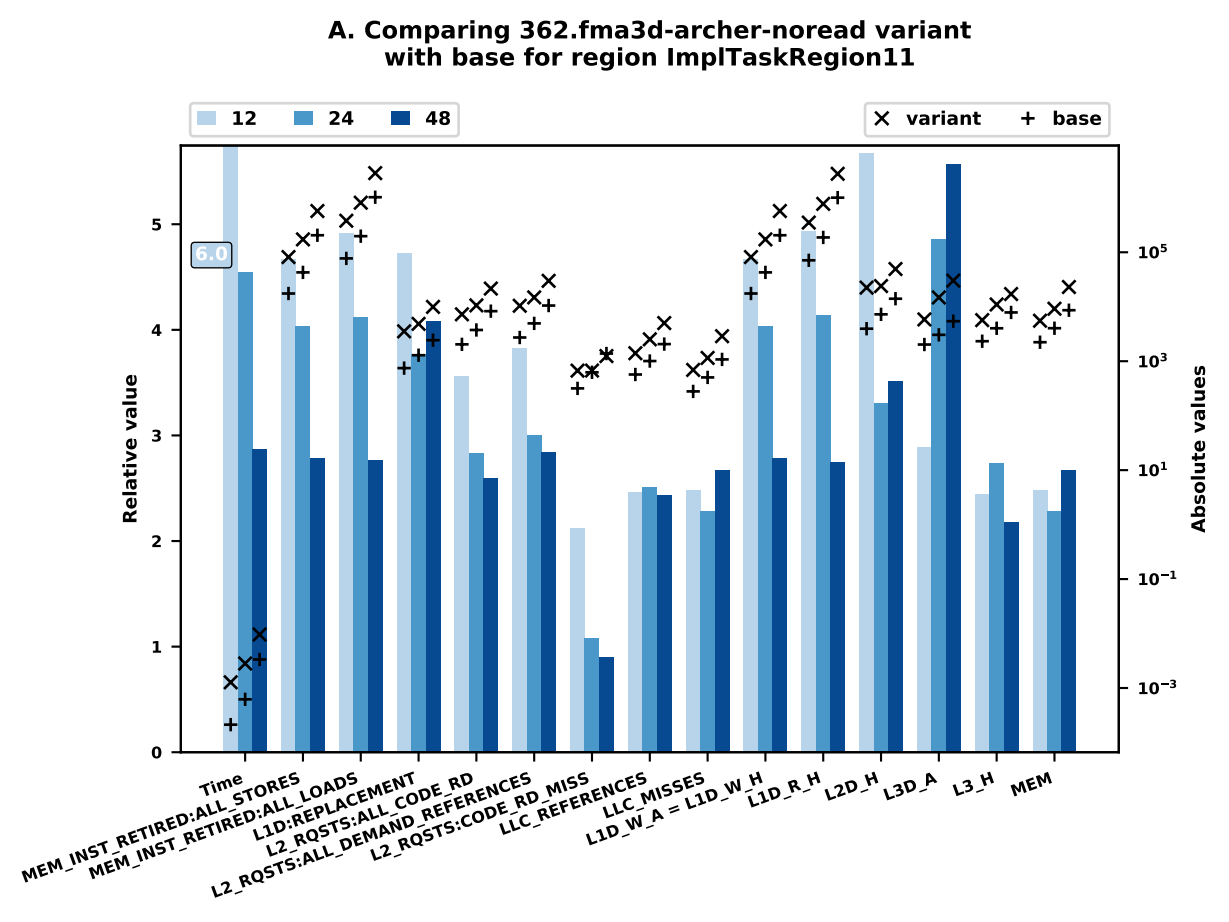

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion10
12
24
48
variant
base
1.5
1.5
1.5
1.5
1.6
Relative value
Absolute values
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
10^{6}
10^{4}
10^{2}
10^{0}
10^{-2}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

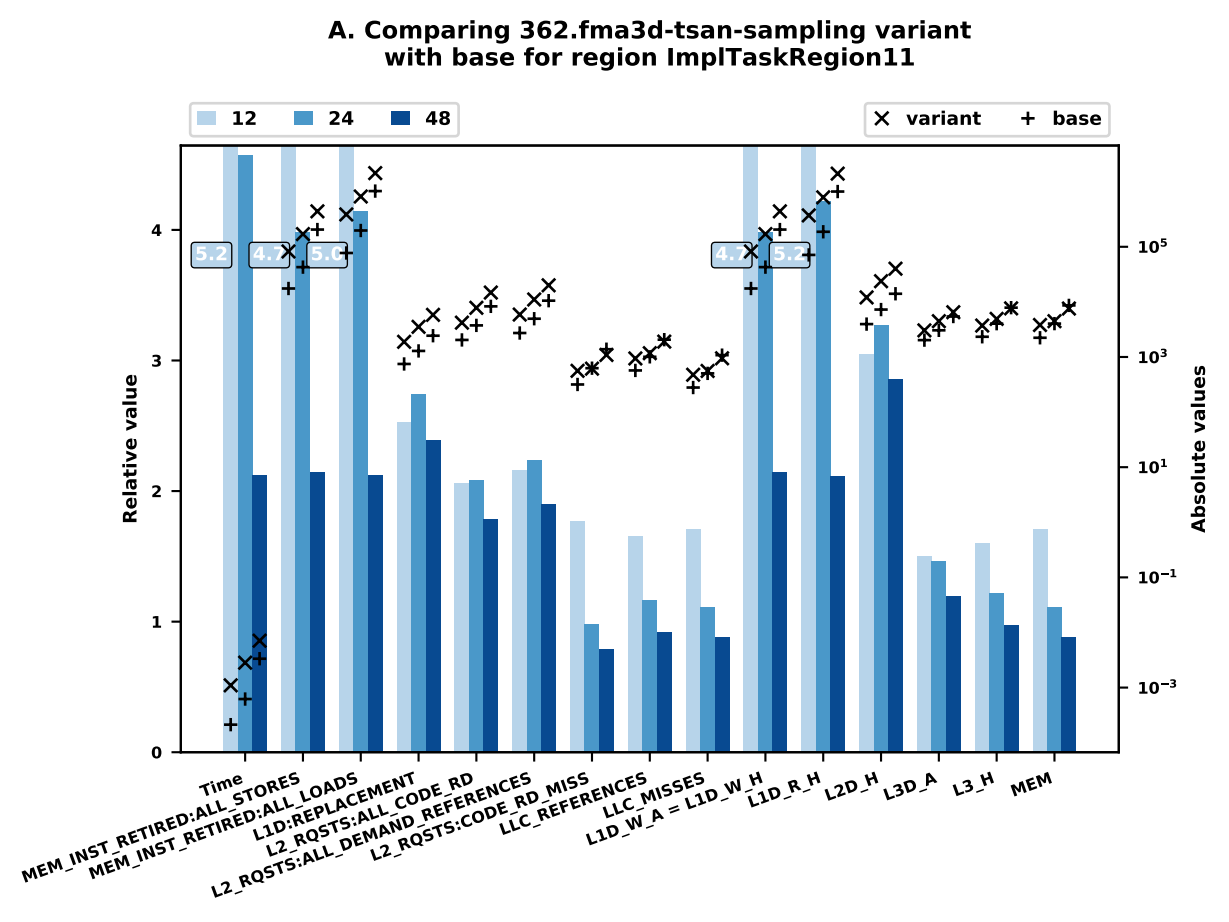

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion10
12
24
48
variant
base
2.2
Relative value
Absolute values
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
10^{6}
10^{4}
10^{2}
10^{0}
10^{-2}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

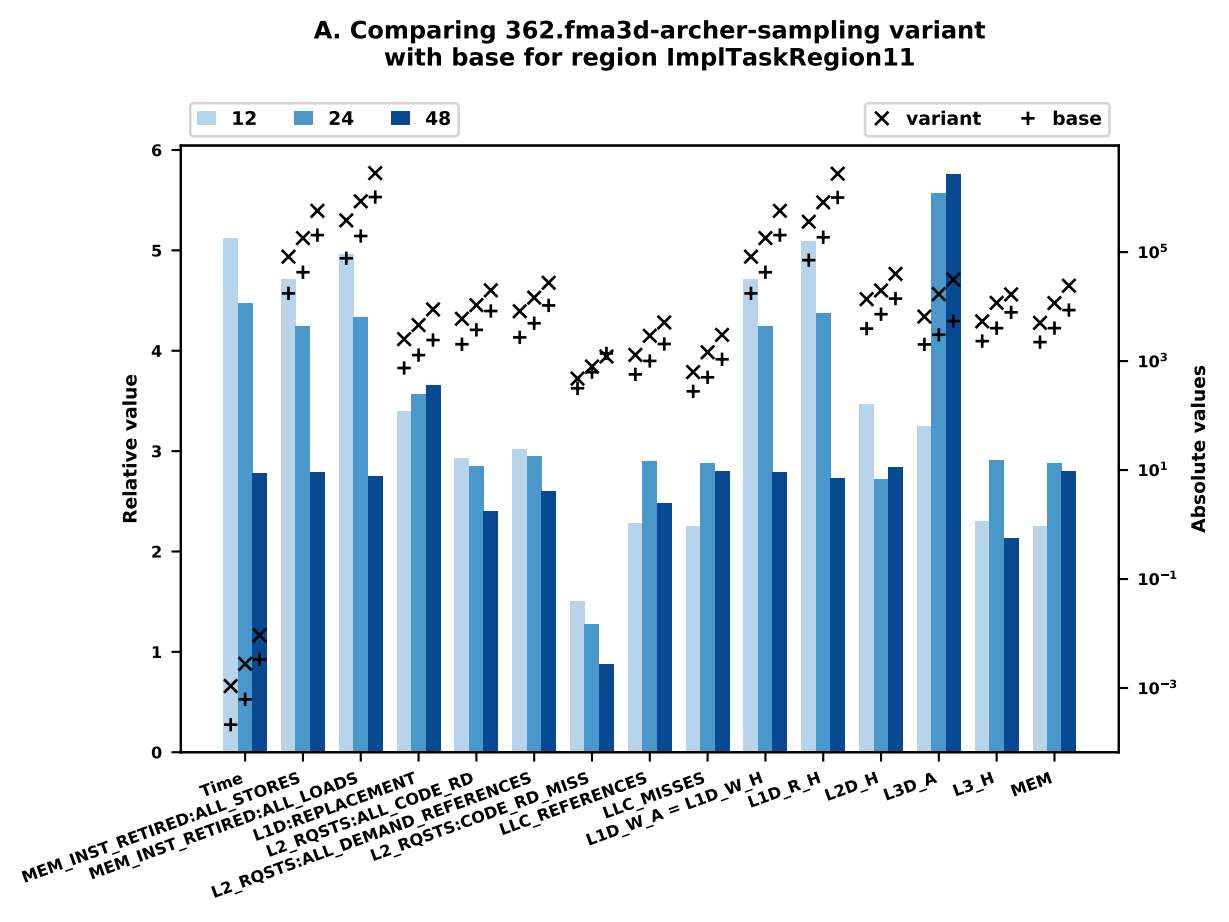

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion10
12
24
48
variant
base
Relative value
Absolute values
1.5
1.5
1.5
1.5
1.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

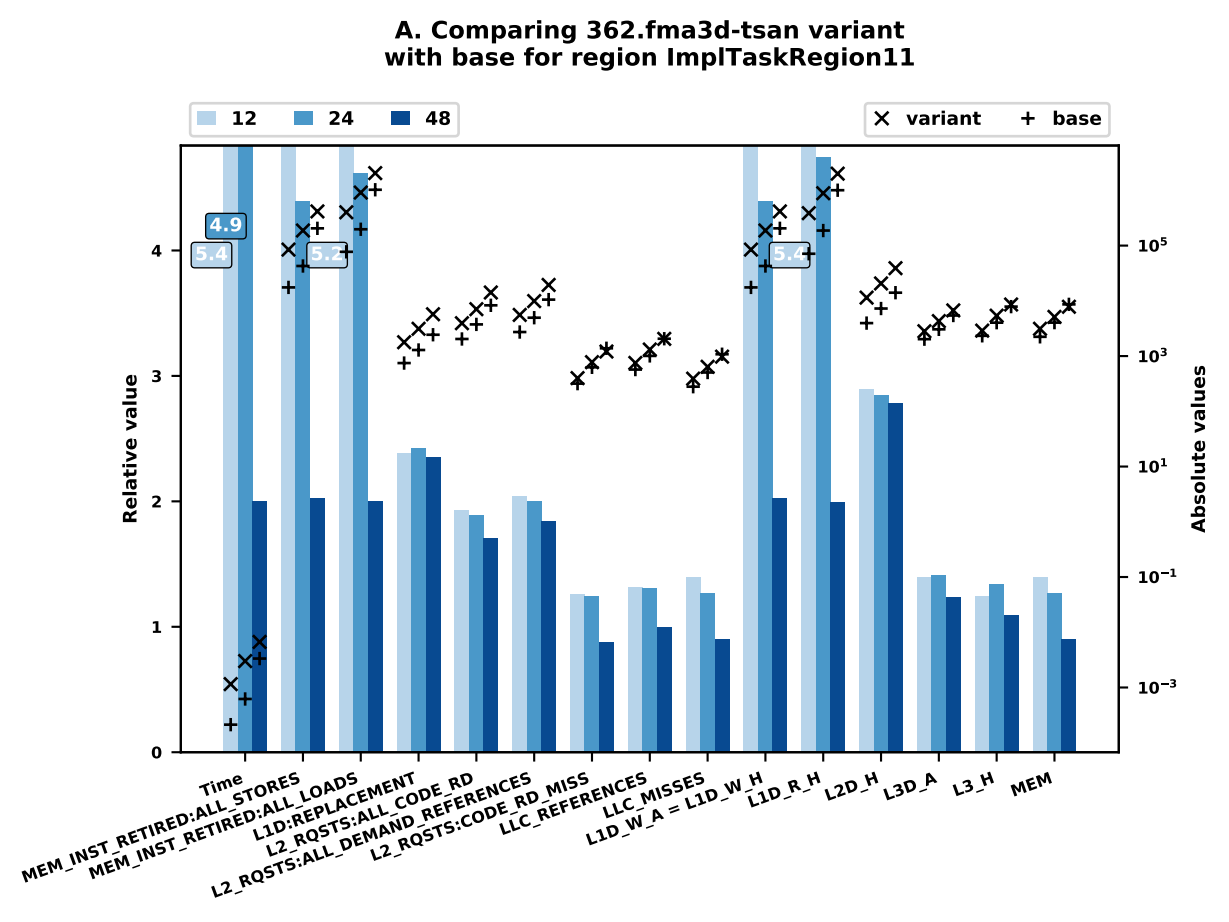

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion10
12
24
48
variant
base
Relative value
Absolute values
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
10^{-2}
10^{0}
10^{2}
10^{4}
10^{6}
2.5
2.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

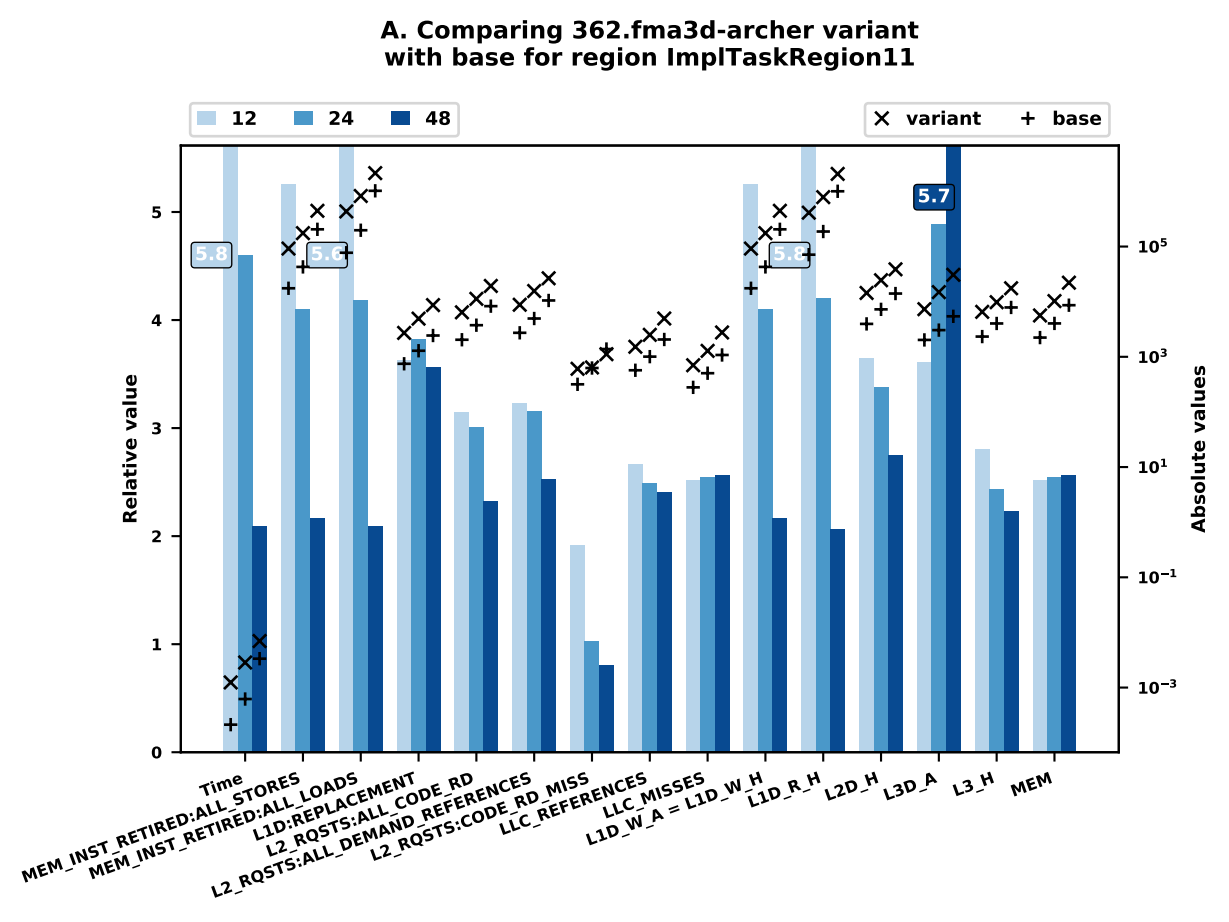

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion11
12
24
48
variant
base
5.1
5.1
4.9
4.9
5.2
Relative value
Absolute values
0
1
2
3
4
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

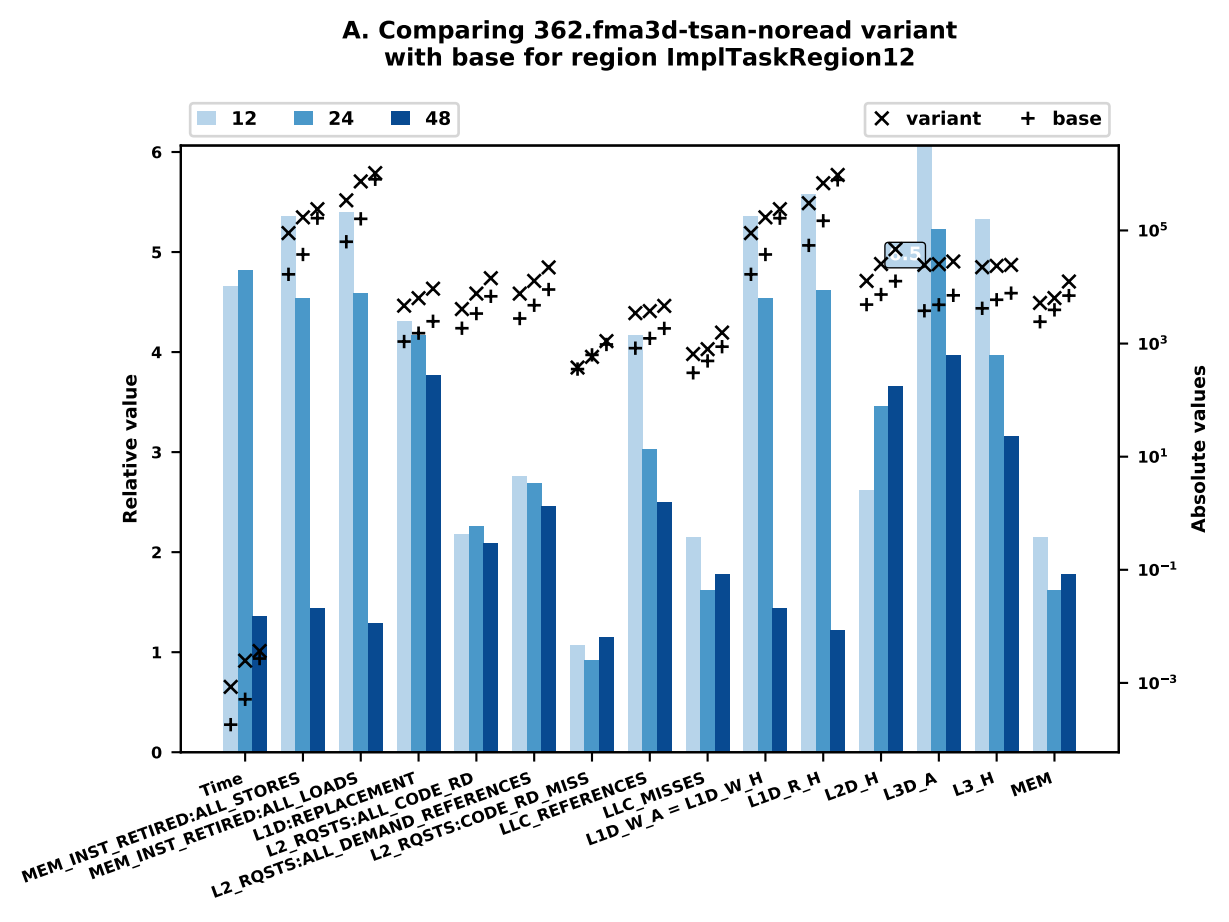

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion11
12
24
48
variant
base
6.0
Relative value
Absolute values
0
1
2
3
4
5
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

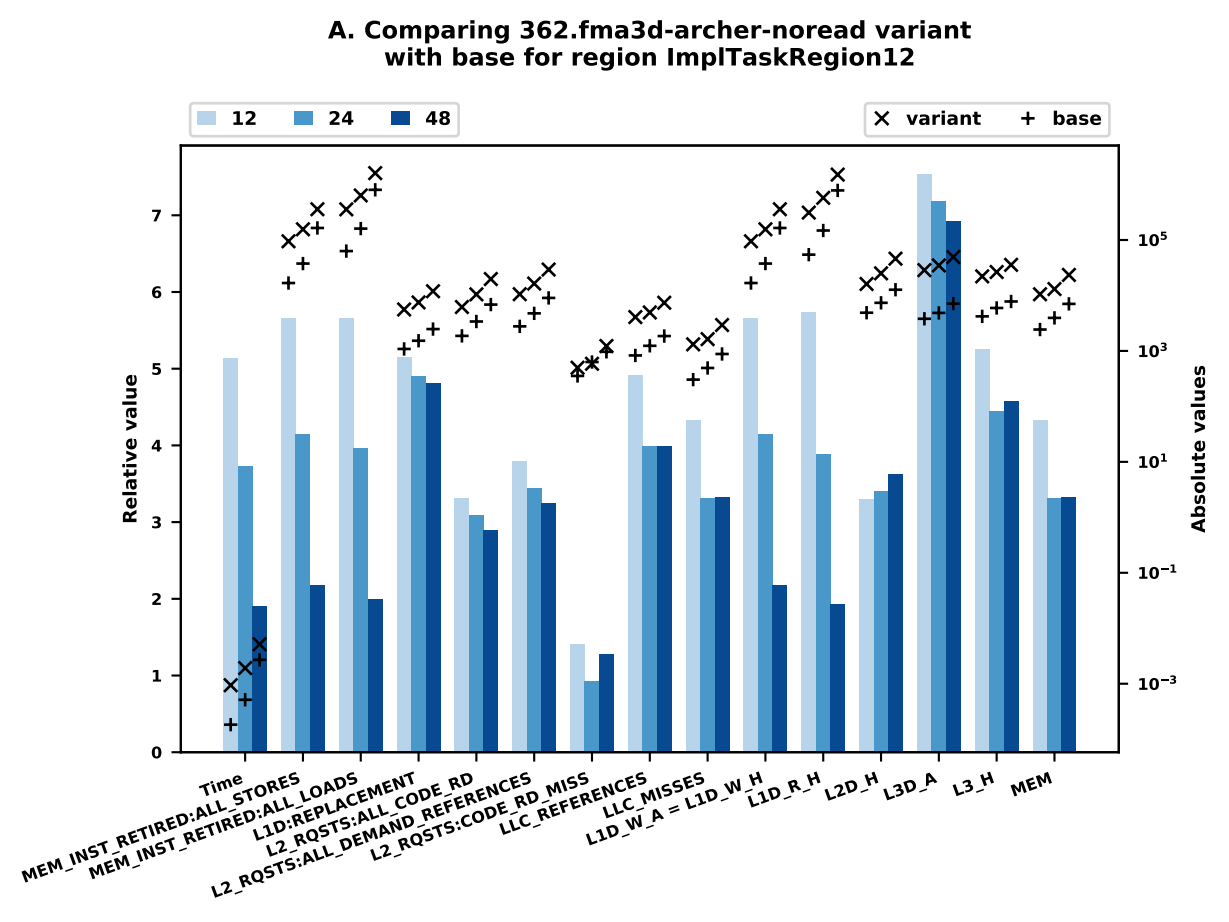

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion11
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
5.2
4.7
5.0
4.7
5.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

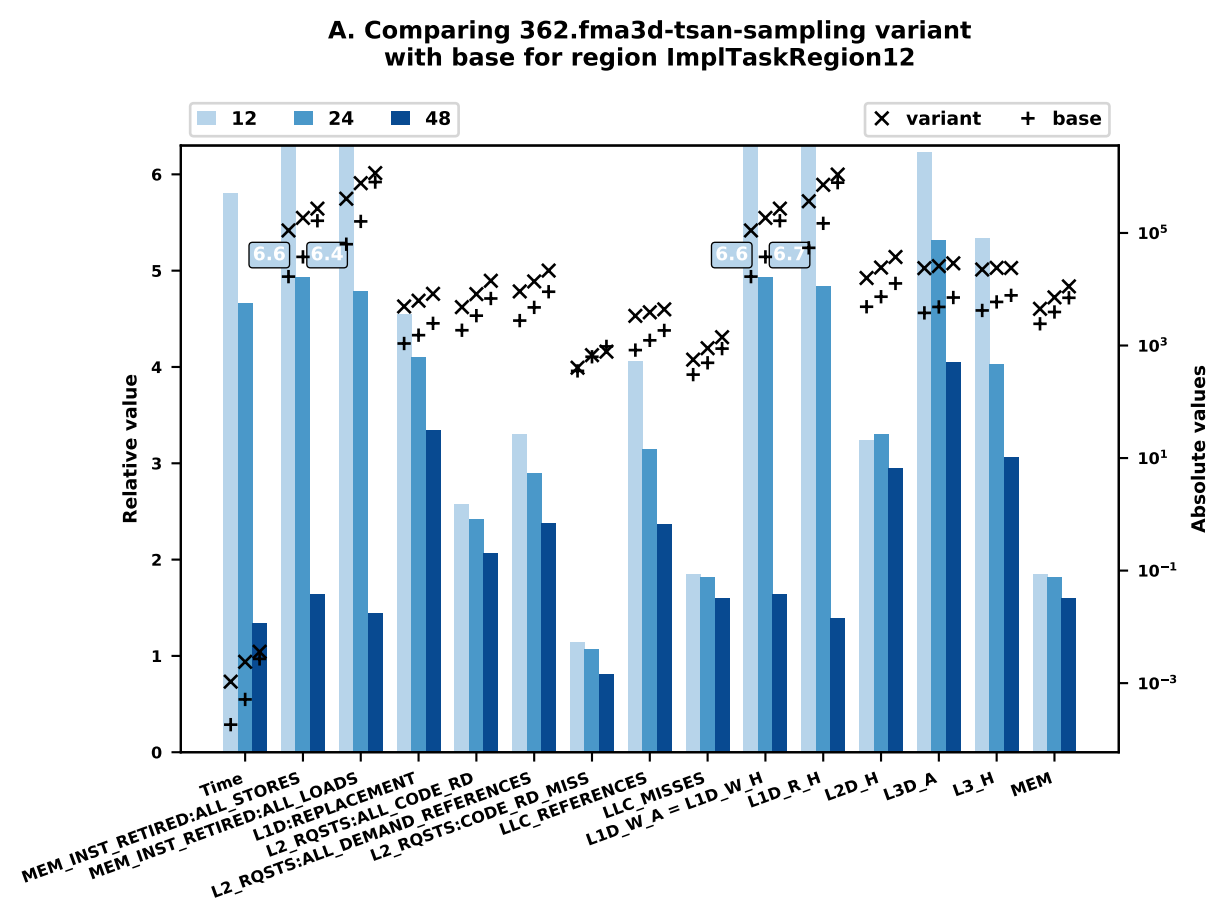

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion11
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
6
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

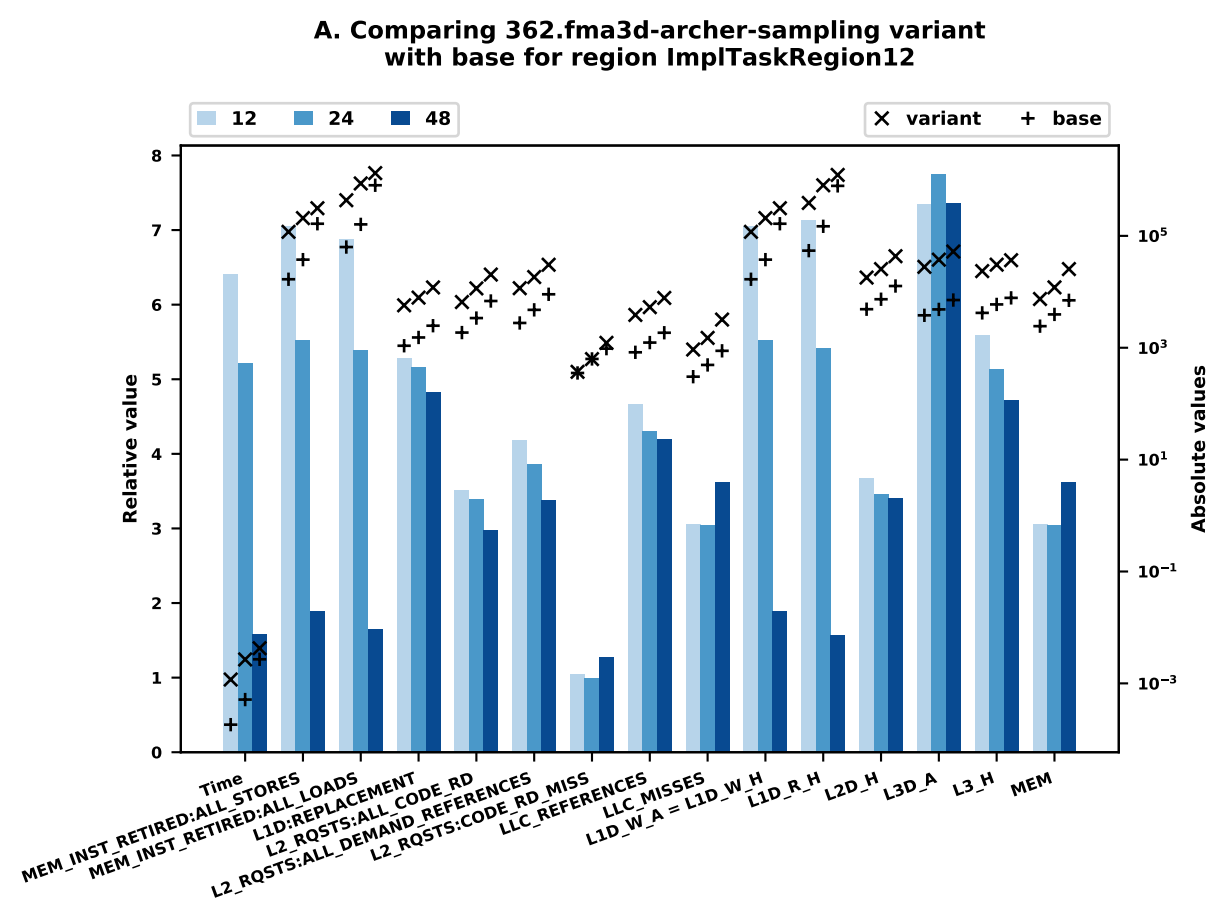

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion11
12
24
48
variant
base
4.9
5.4
5.2
5.4
Relative value
Absolute values
0
1
2
3
4
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

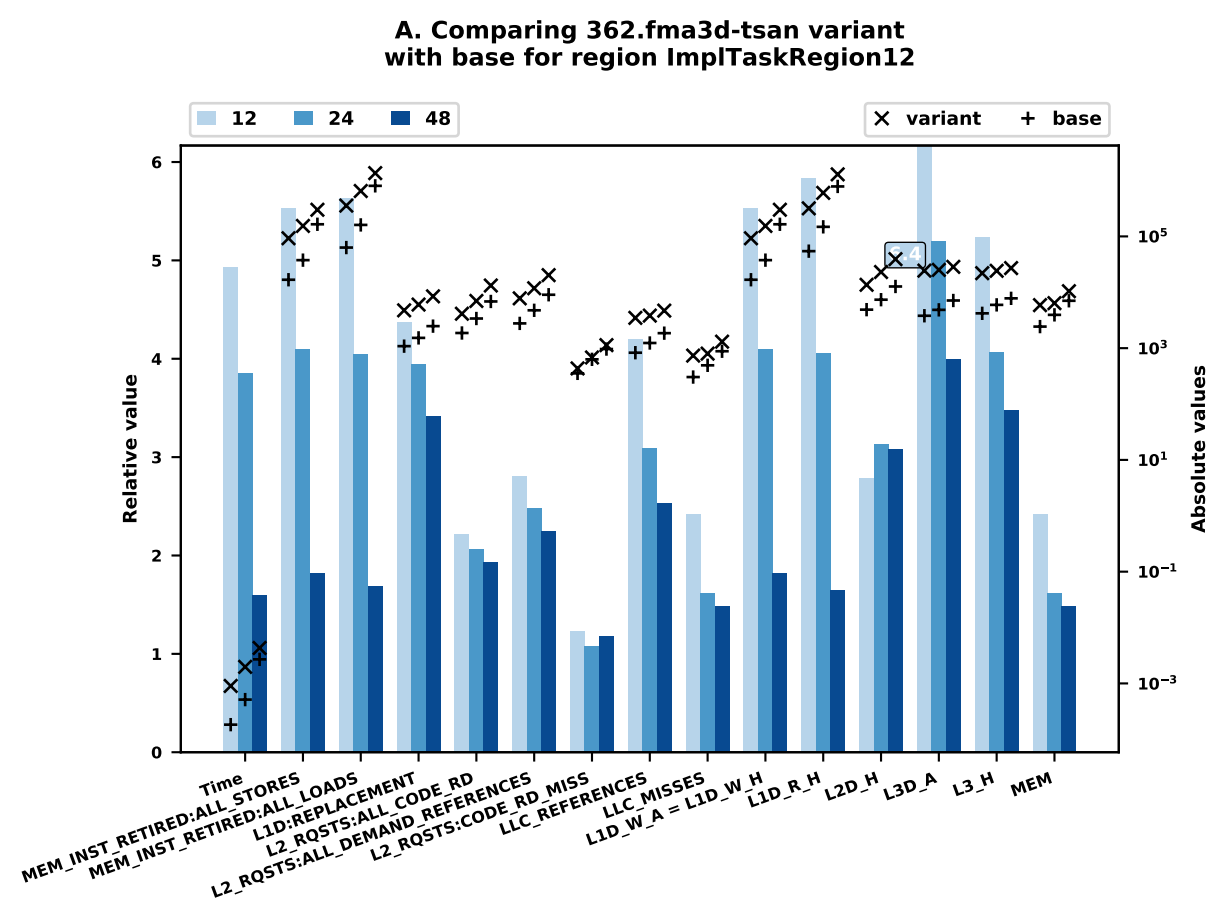

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion11
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
5.8
5.6
5.8
5.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

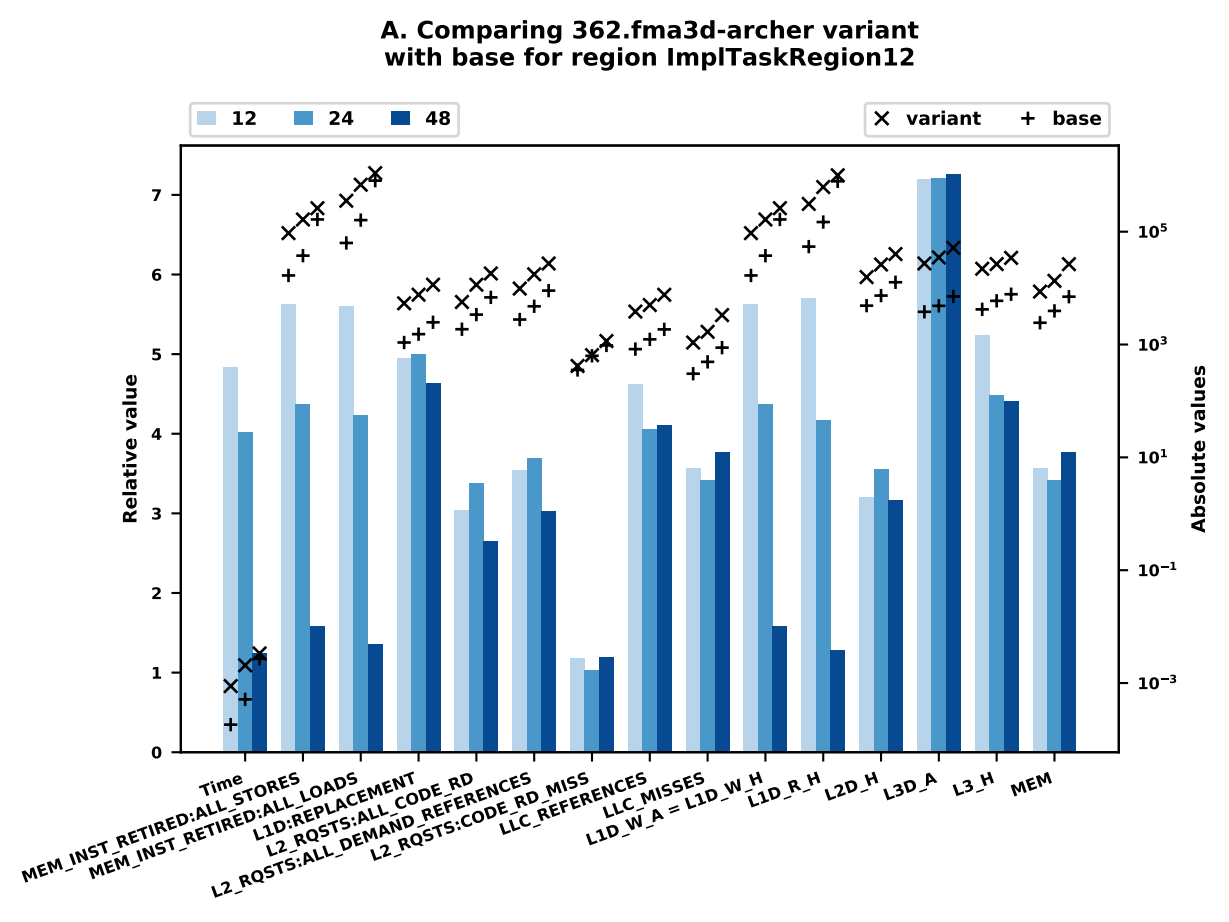

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion12
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
6
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

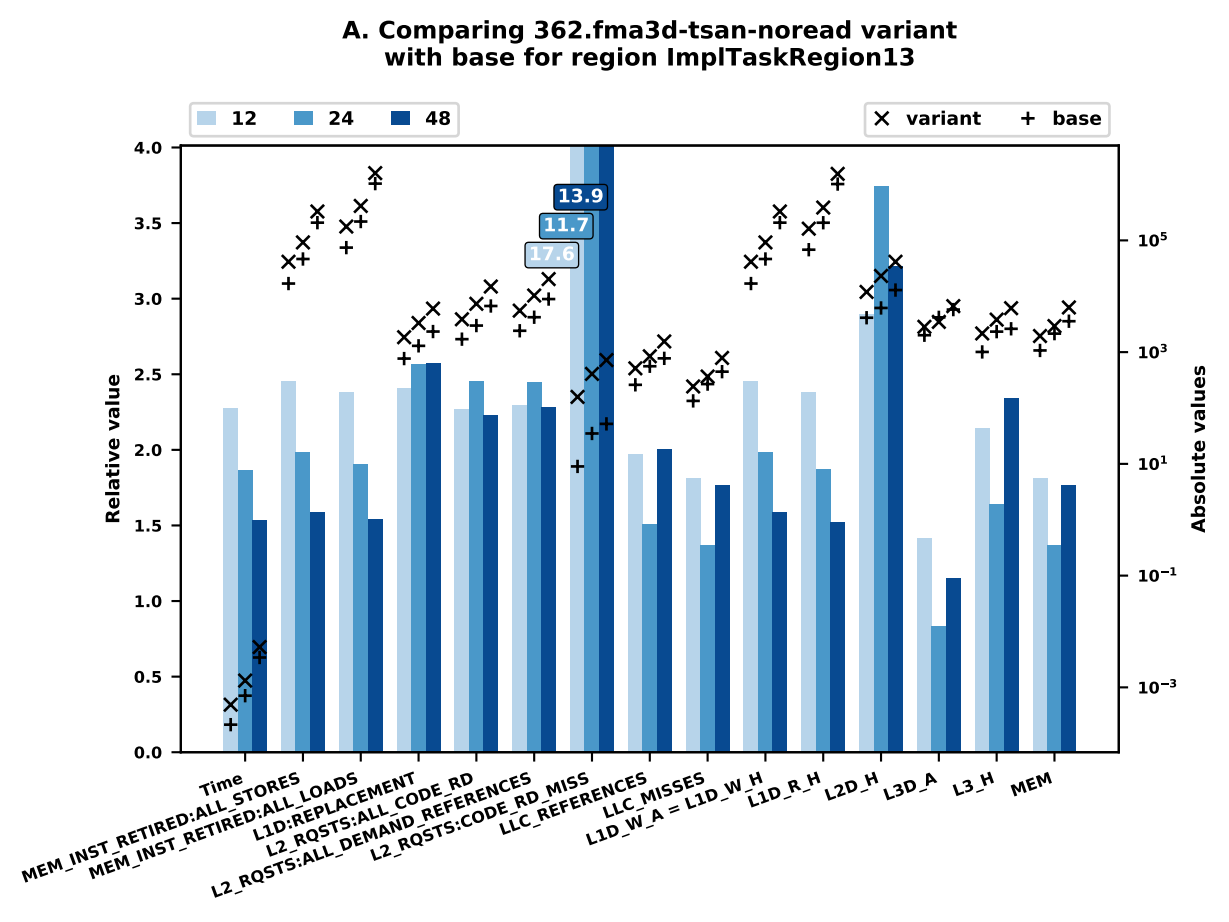

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion12
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
6
7
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

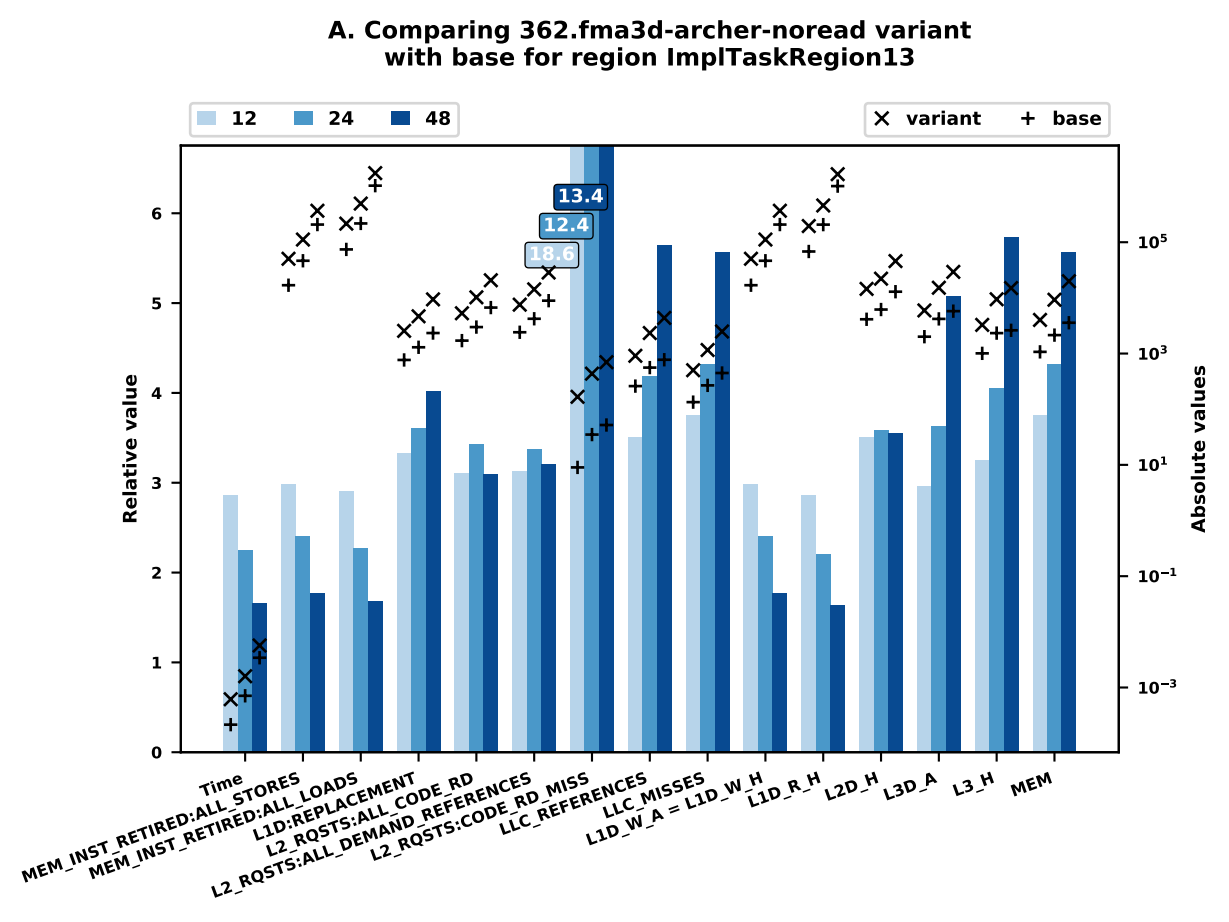

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion12
12
24
48
variant
base
Relative value
Absolute values
6.6
6.4
6.6
6.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

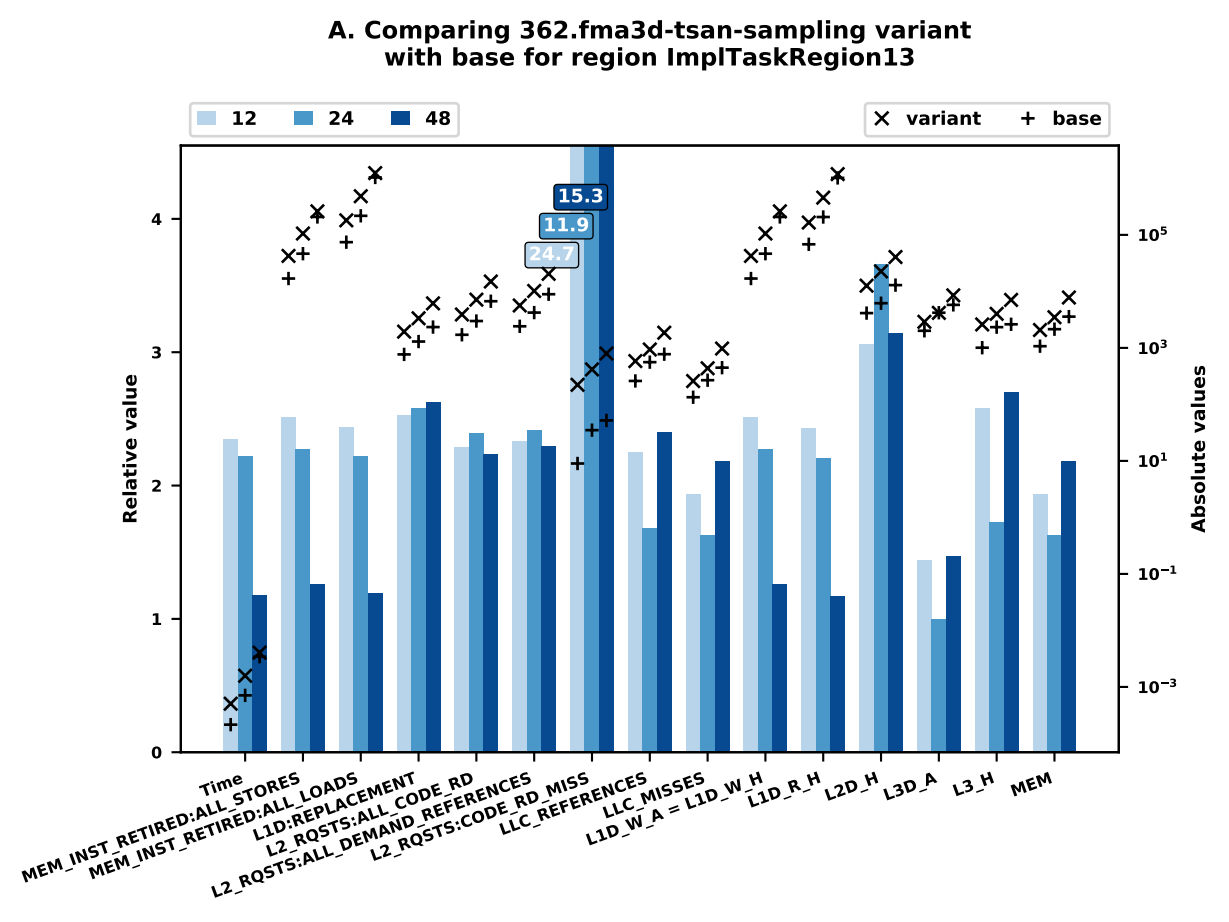

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion12
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
6
7
8
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

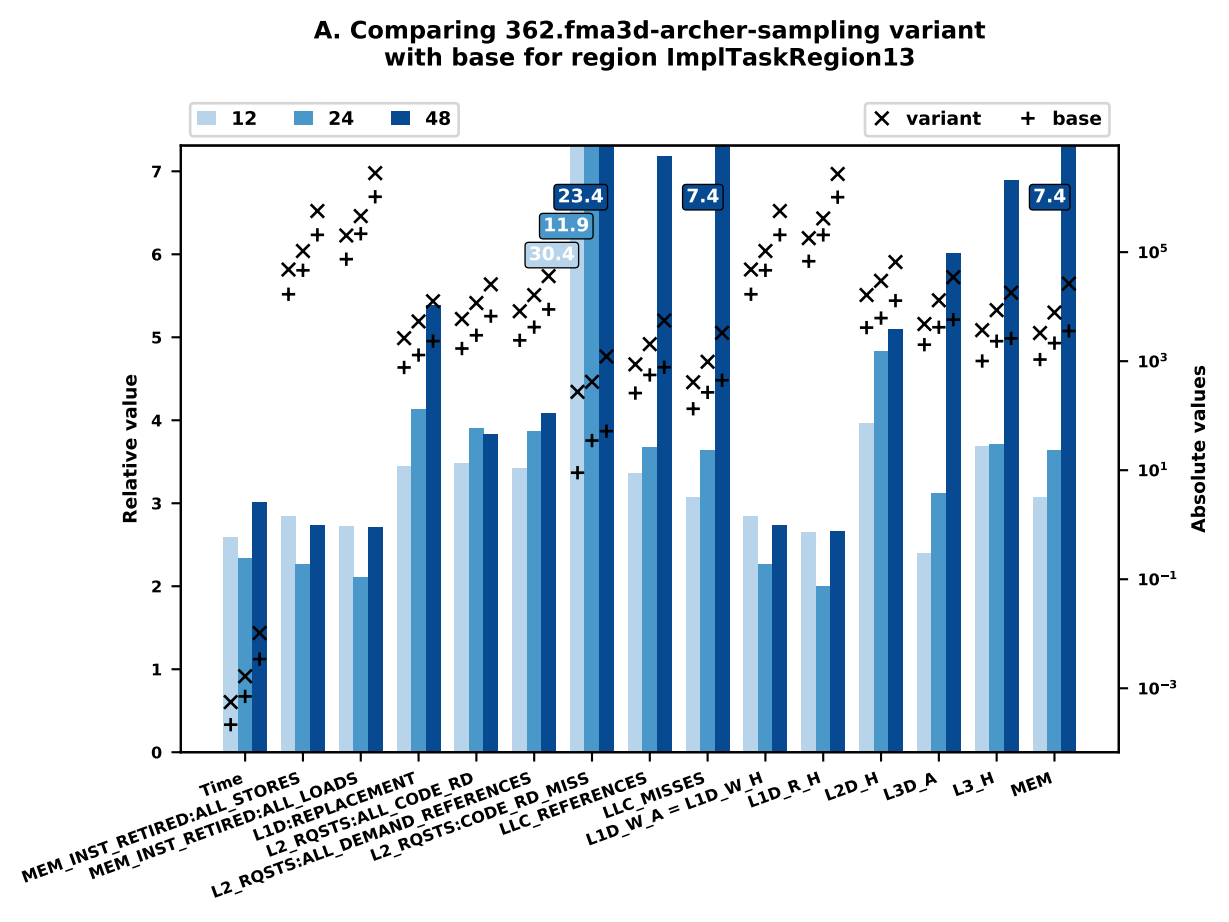

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion12
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
6
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

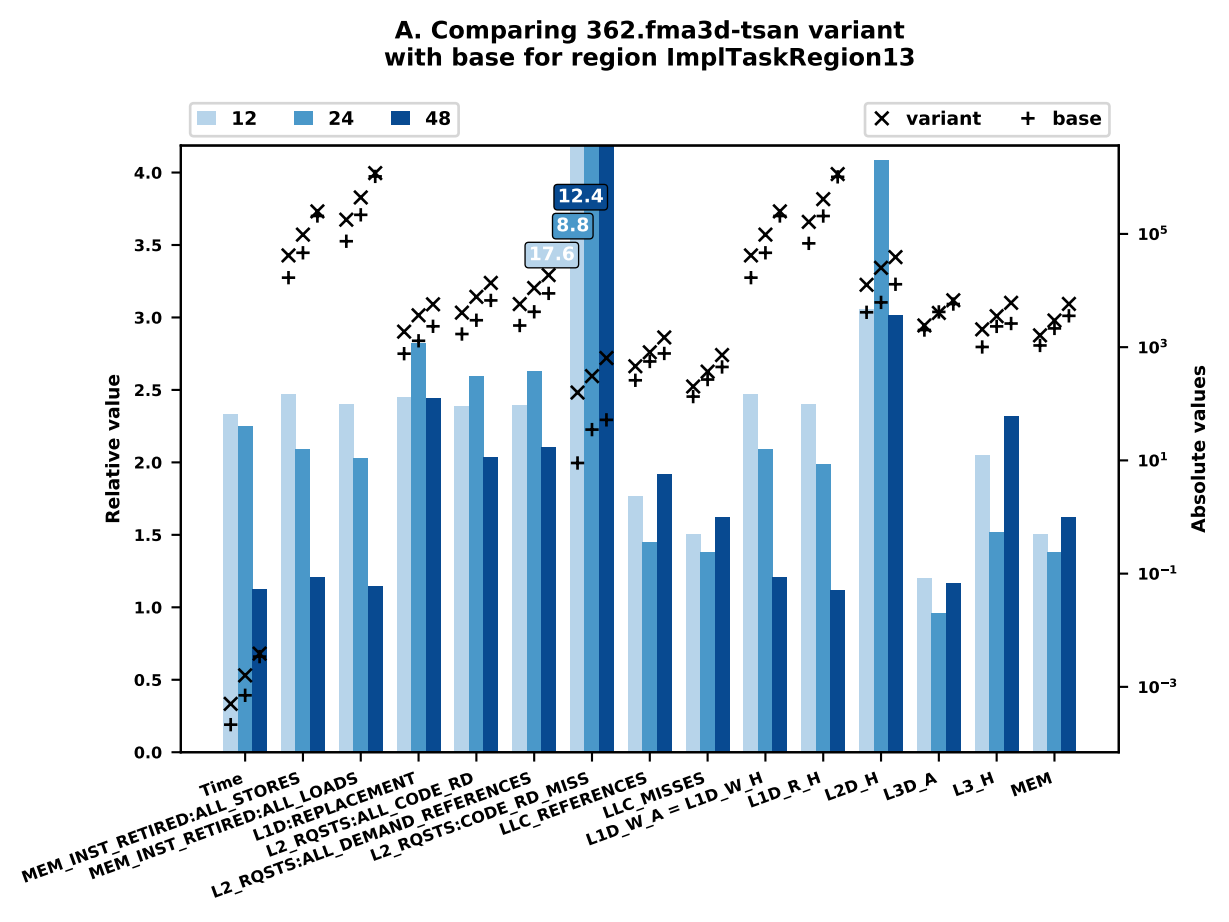

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion12
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
6
7
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

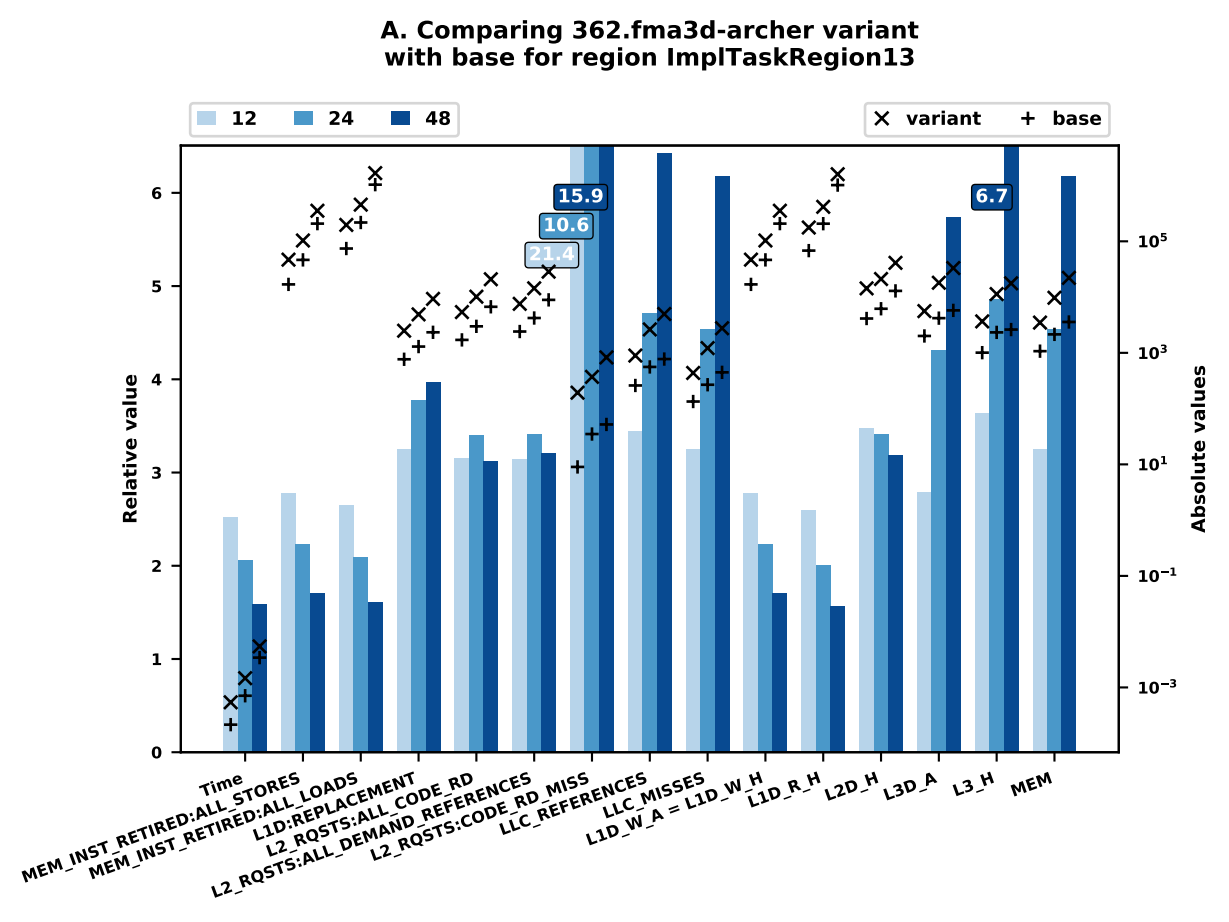

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion13
12
24
48
variant
base
Relative value
Absolute values
13.9
11.7
17.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

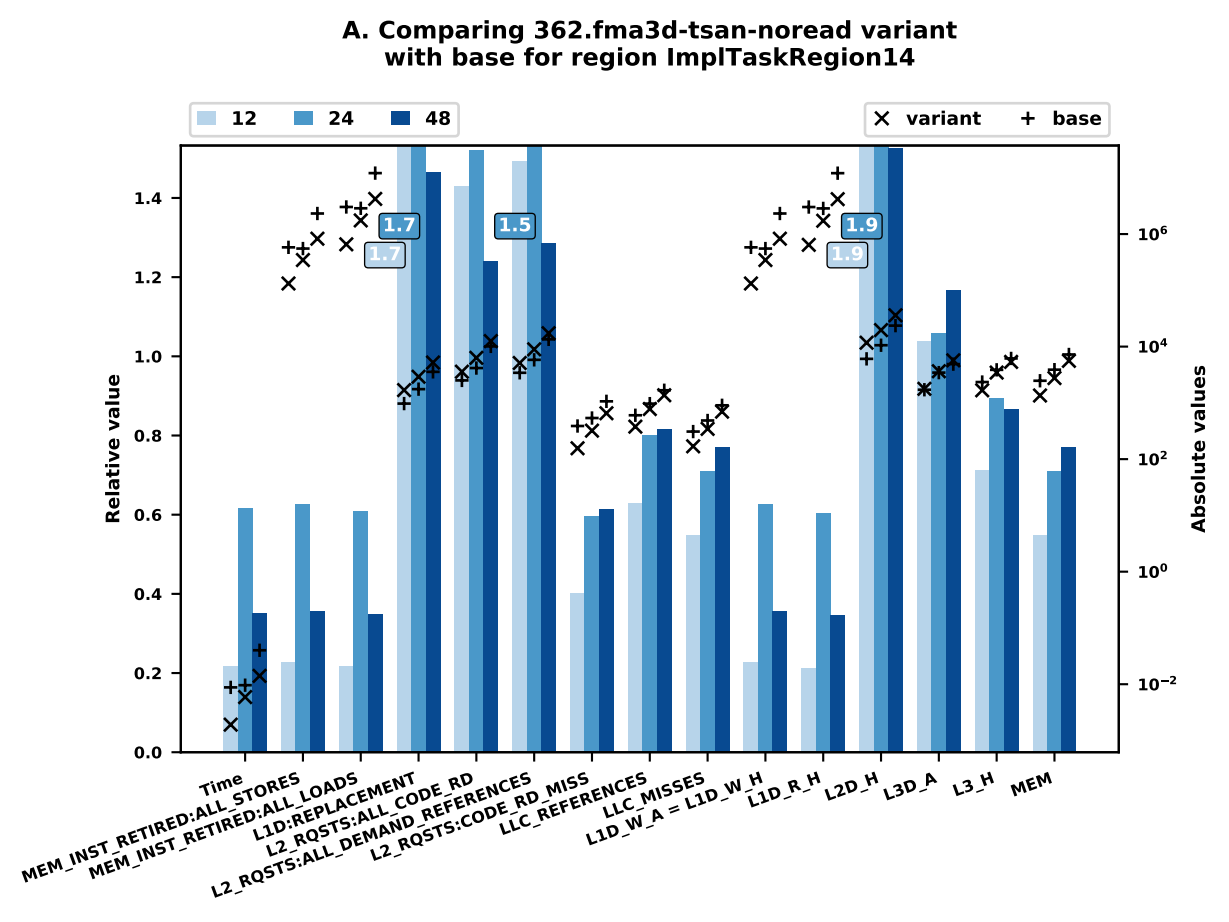

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion13
12
24
48
variant
base
13.4
12.4
18.6
Relative value
Absolute values
0
1
2
3
4
5
6
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

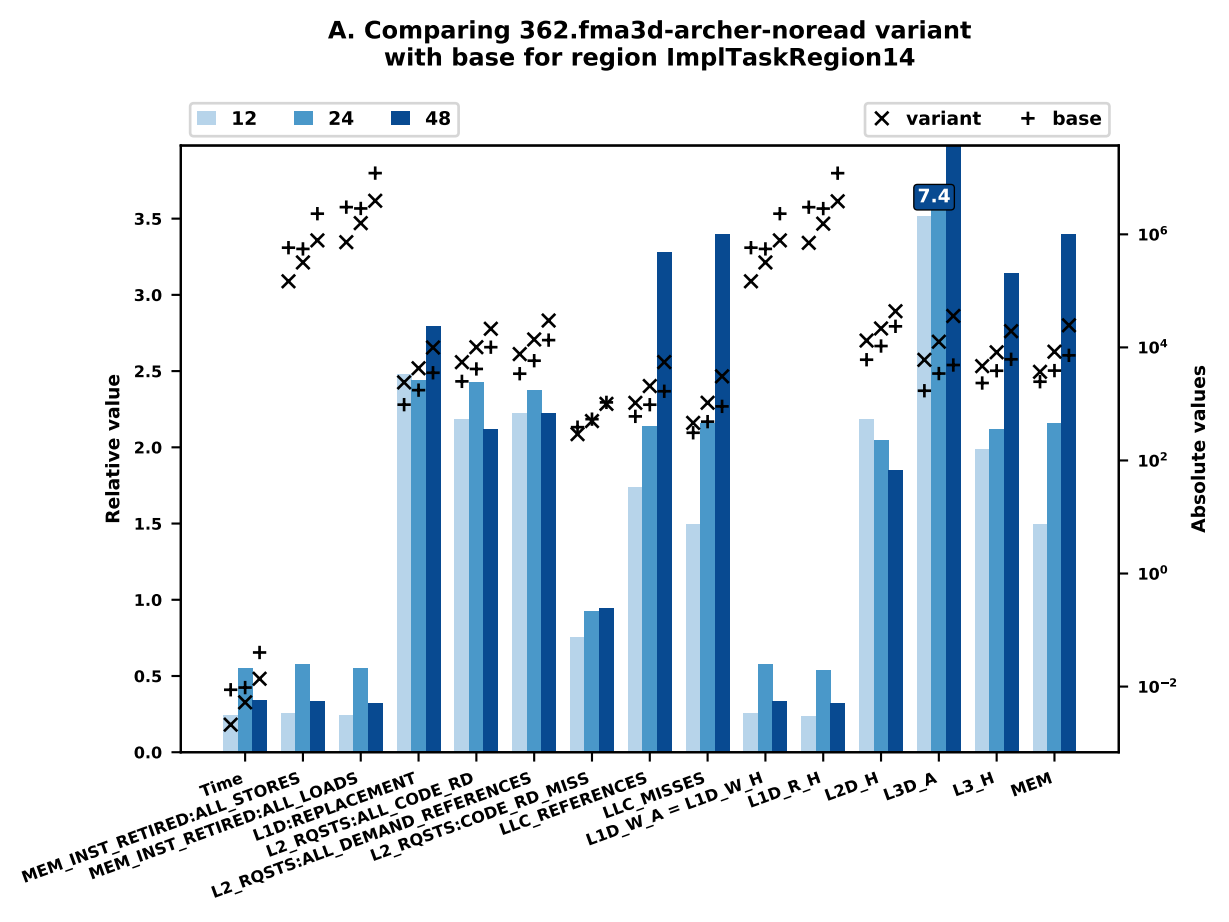

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion13
12
24
48
variant
base
15.3
11.9
24.7
Relative value
Absolute values
0
1
2
3
4
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

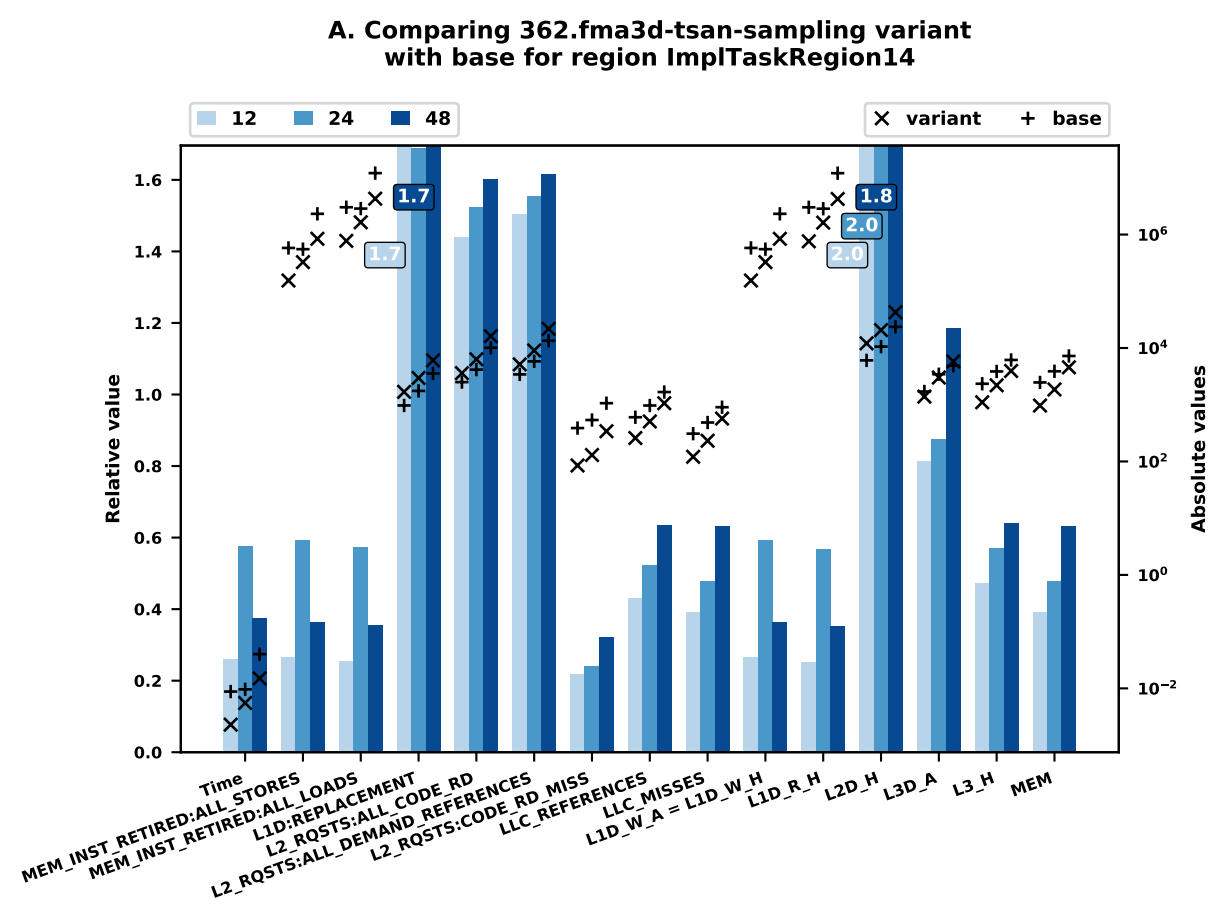

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion13
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
6
7
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
23.4
11.9
30.4
7.4
7.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

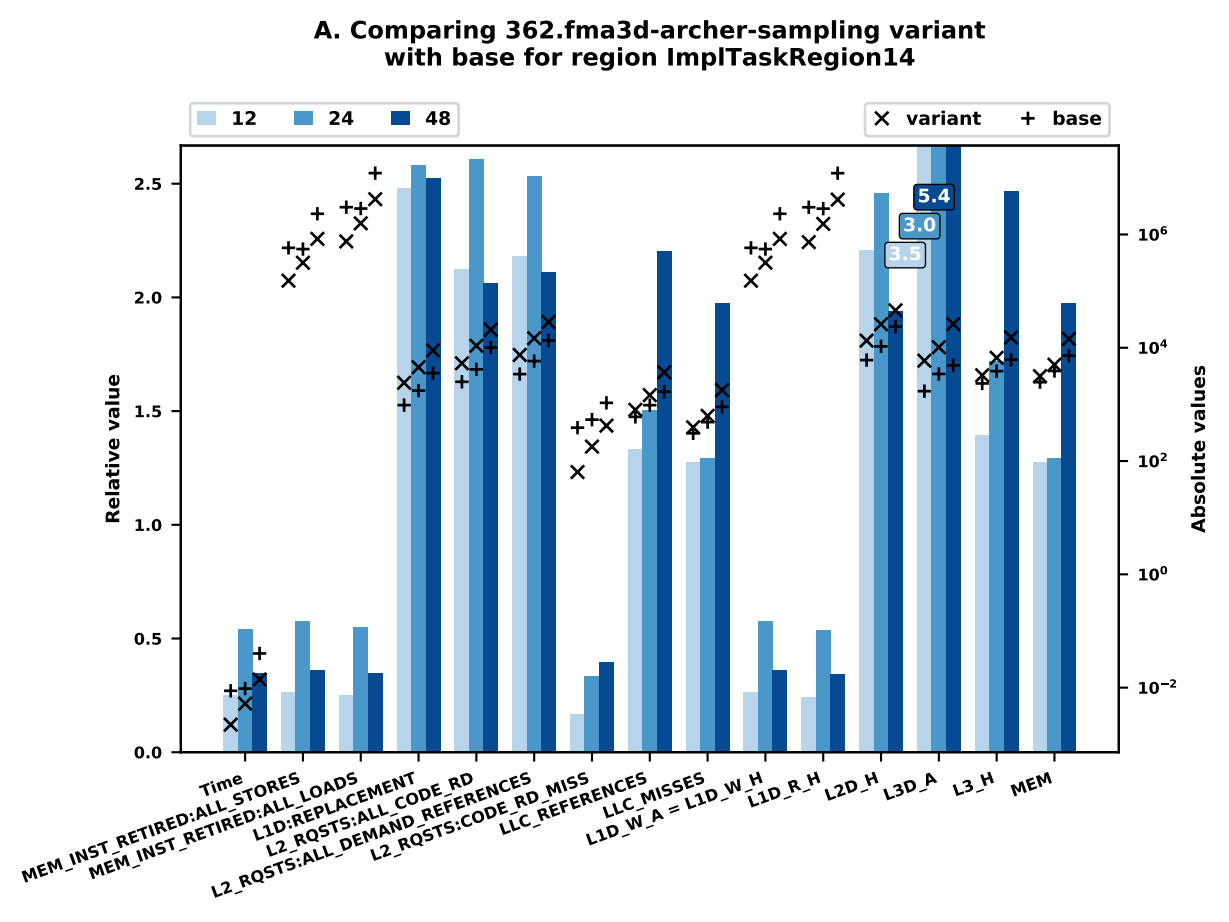

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion13
12
24
48
variant
base
12.4
8.8
17.6
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

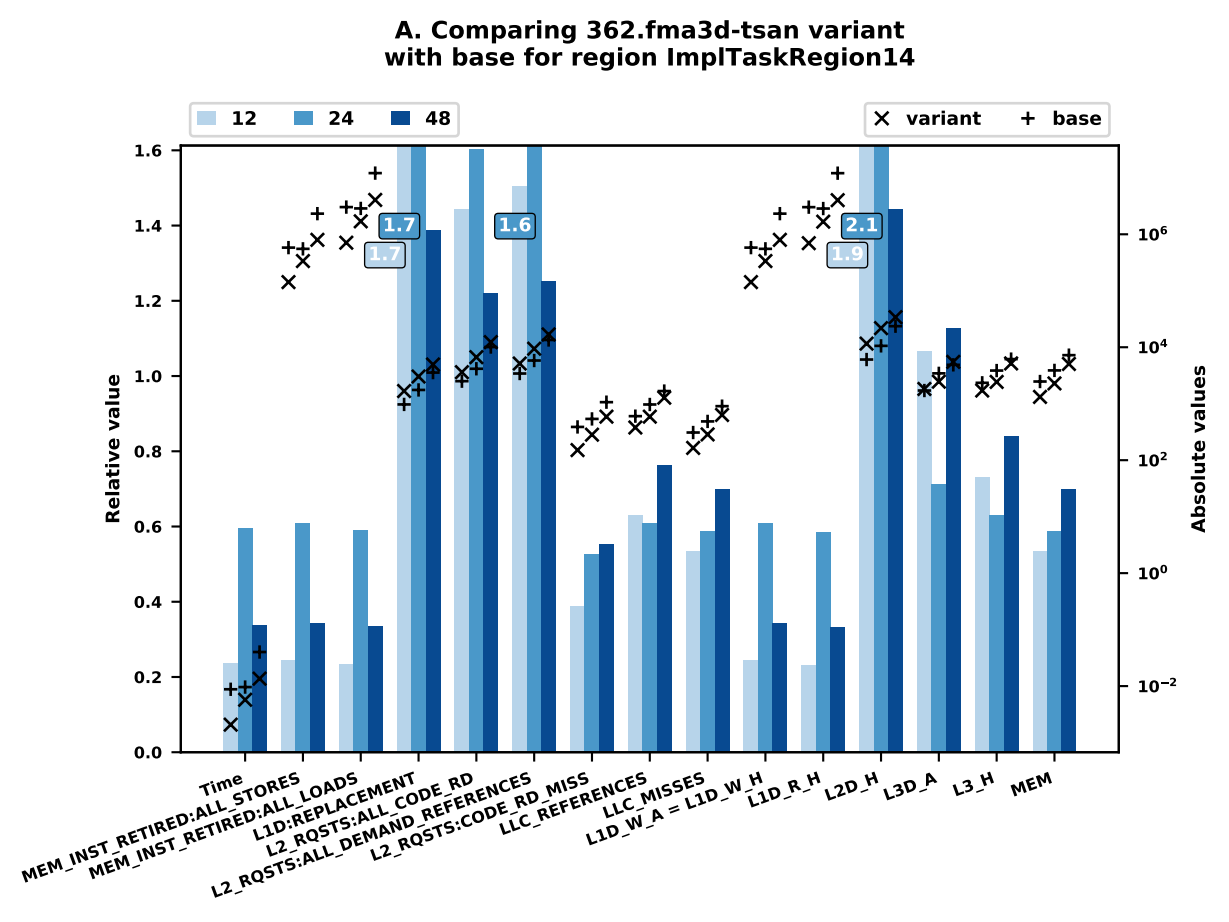

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion13
12
24
48
variant
base
Relative value
Absolute values
15.9
10.6
21.4
6.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

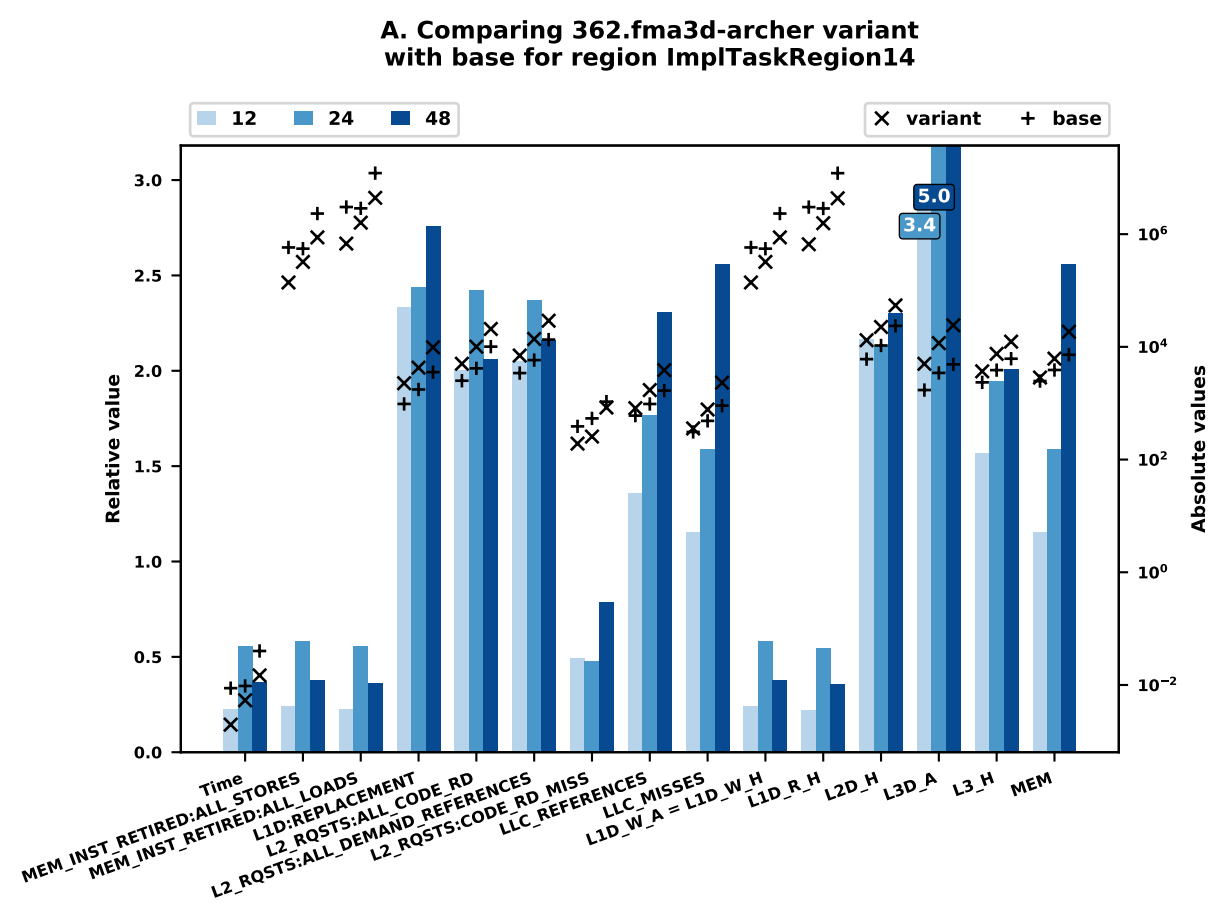

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion14
12
24
48
variant
base
Relative value
Absolute values
1.7
1.7
1.5
1.9
1.9
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
10^{-2}
10^{0}
10^{2}
10^{4}
10^{6}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

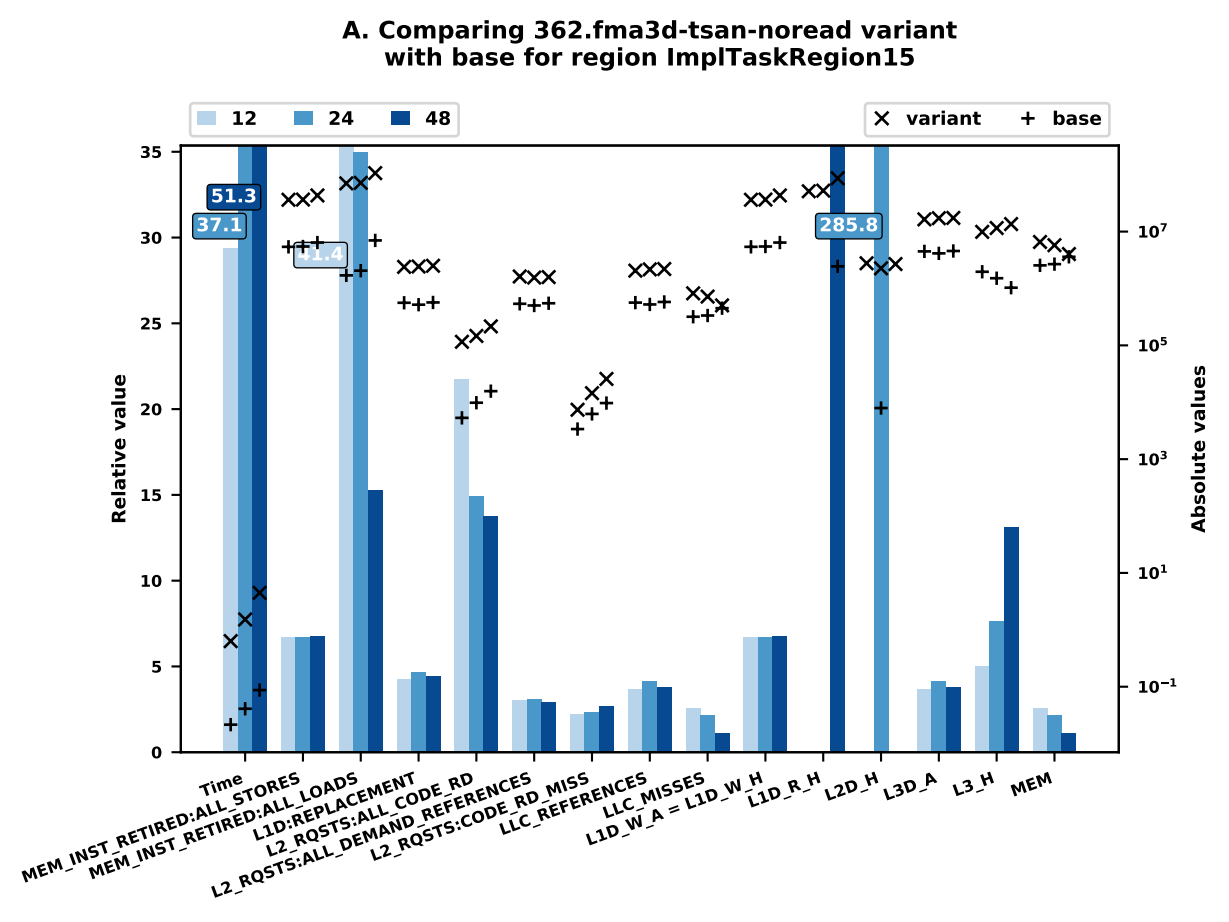

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion14
12
24
48
variant
base
7.4
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
10^{6}
10^{4}
10^{2}
10^{0}
10^{-2}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

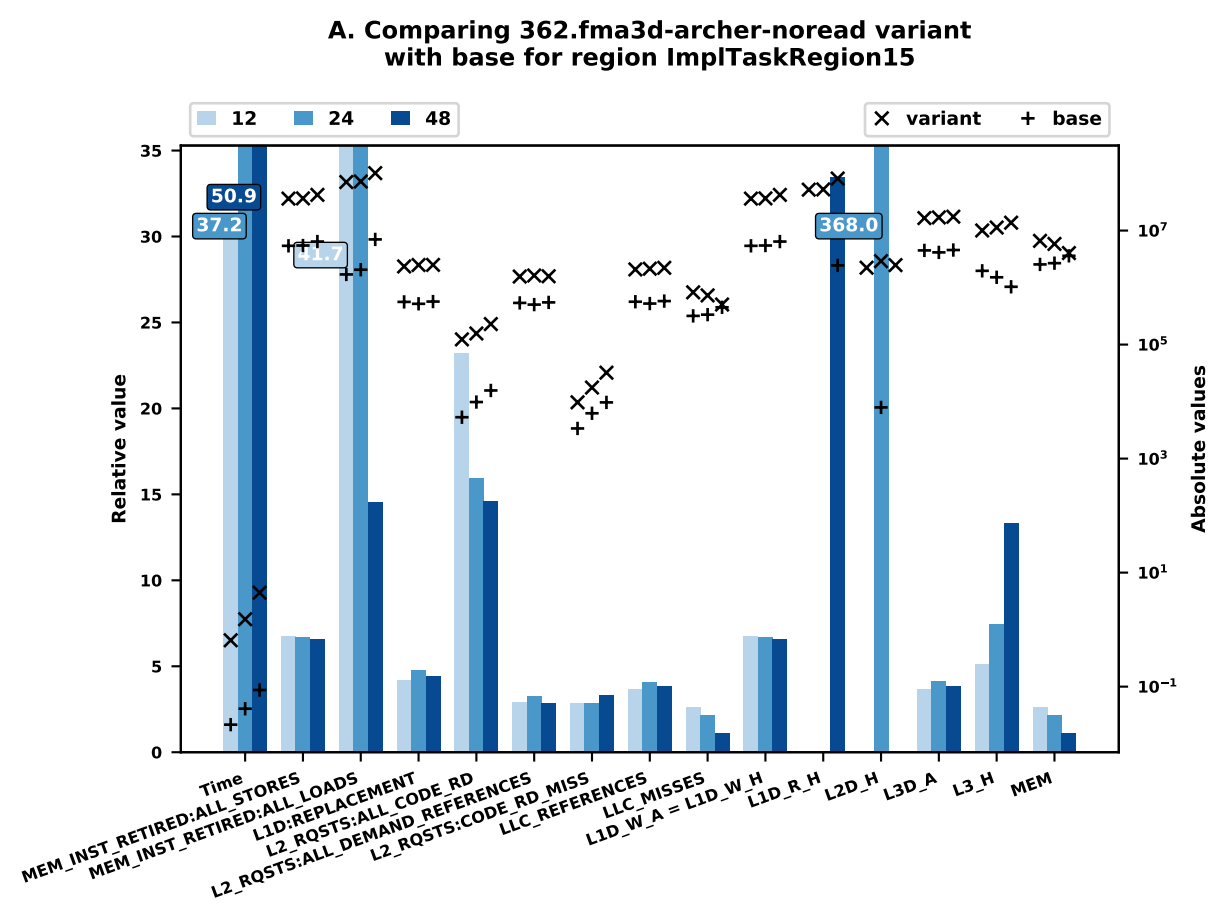

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion14
12
24
48
variant
base
Relative value
Absolute values
1.7
1.7
1.8
2.0
2.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

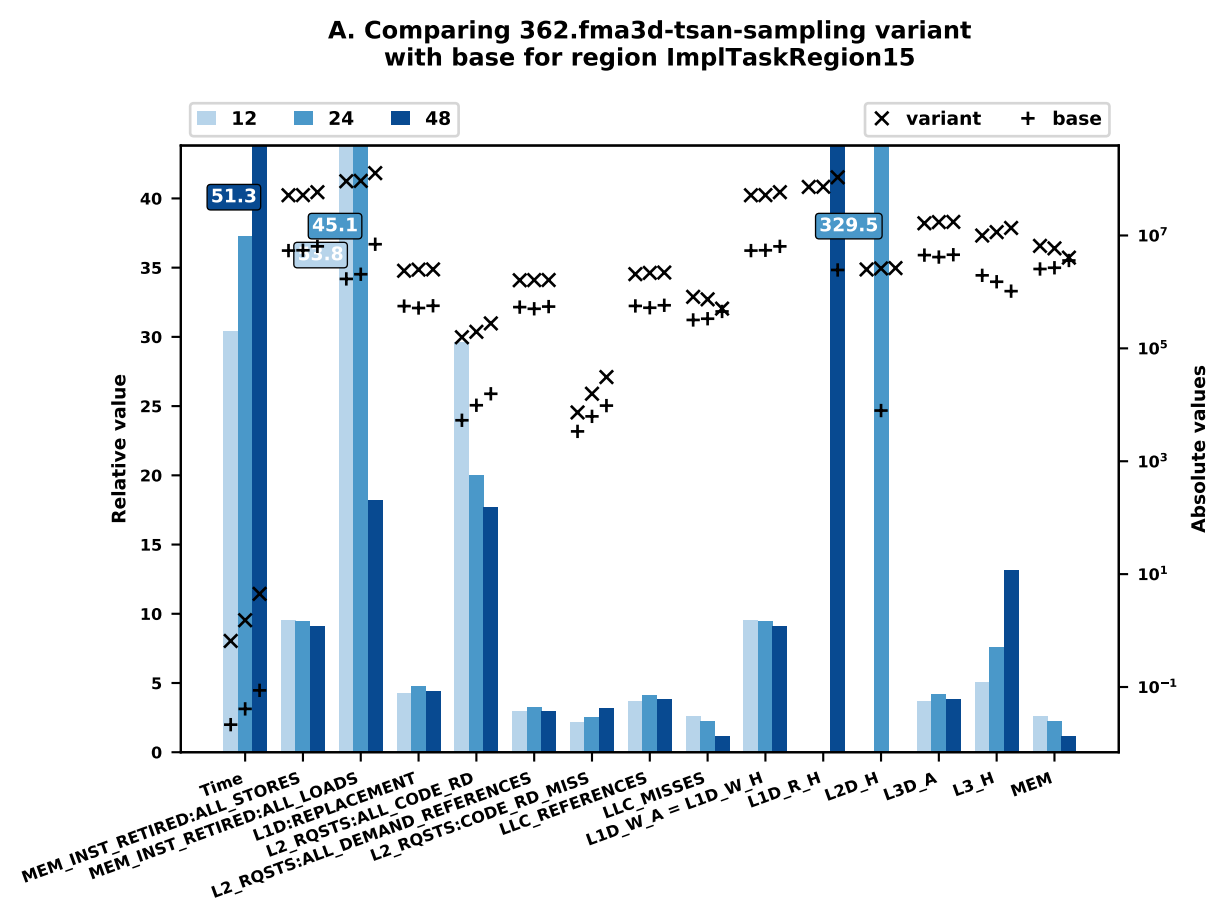

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion14
12
24
48
variant
base
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
10^{6}
10^{4}
10^{2}
10^{0}
10^{-2}
5.4
3.0
3.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

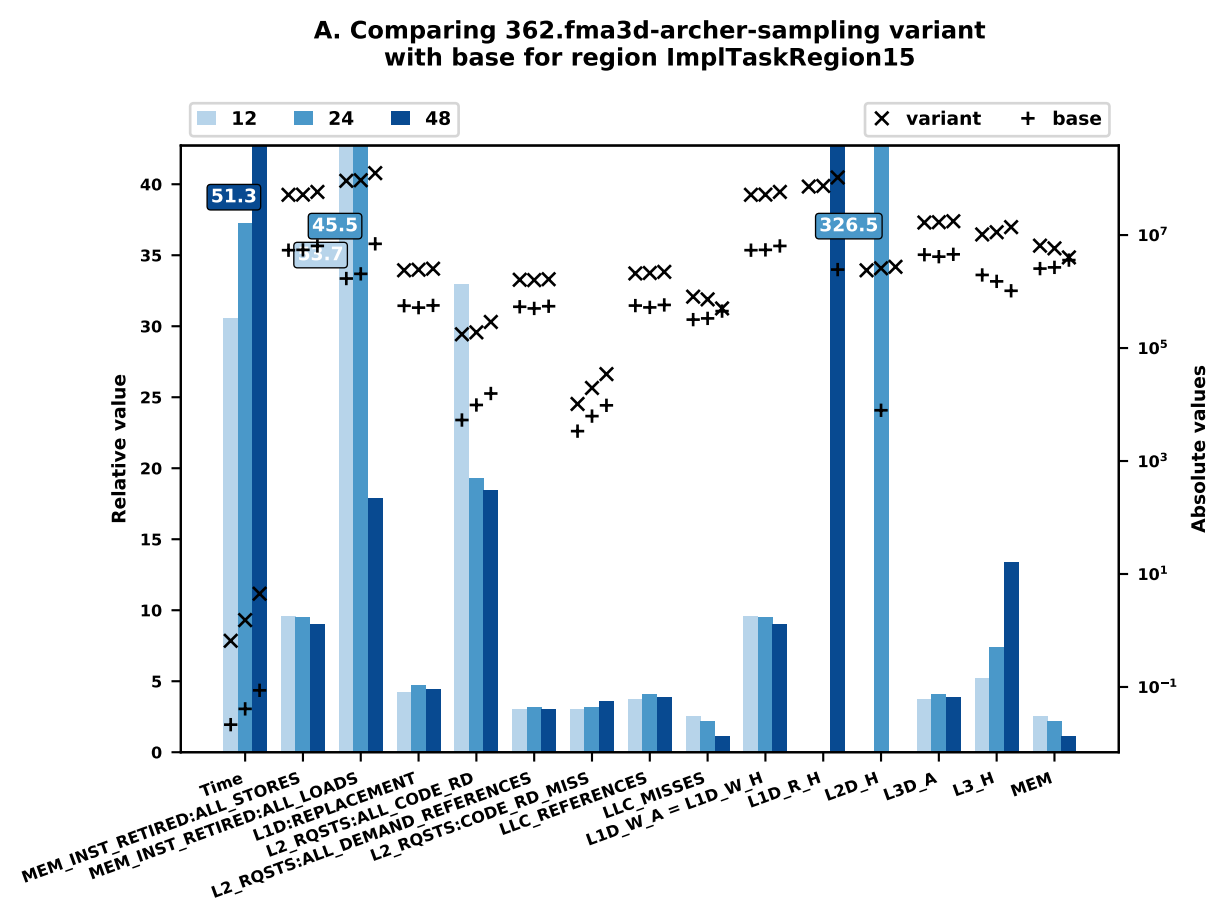

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion14
12
24
48
variant
base
Relative value
Absolute values
1.7
1.7
1.6
2.1
1.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

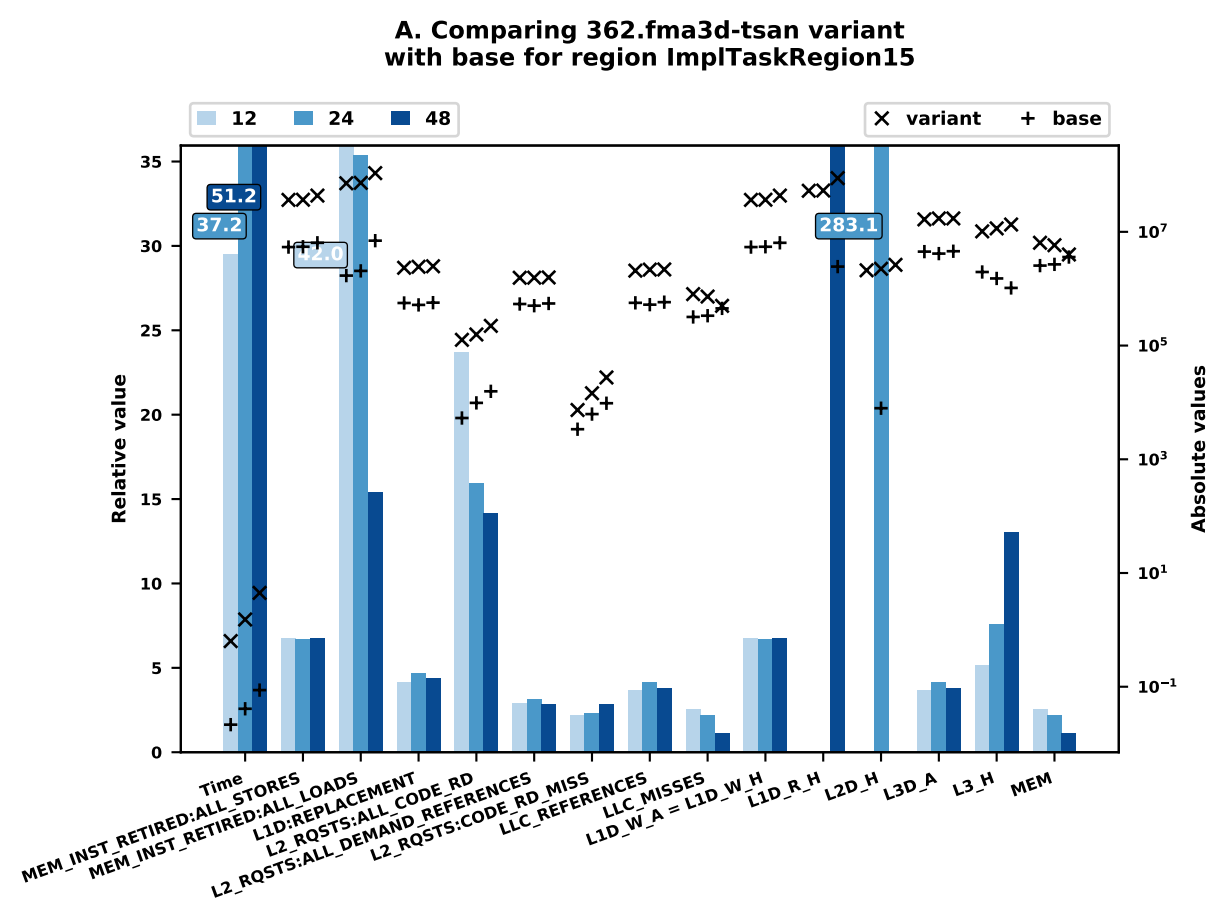

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion14
12
24
48
variant
base
Relative value
Absolute values
5.0
3.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

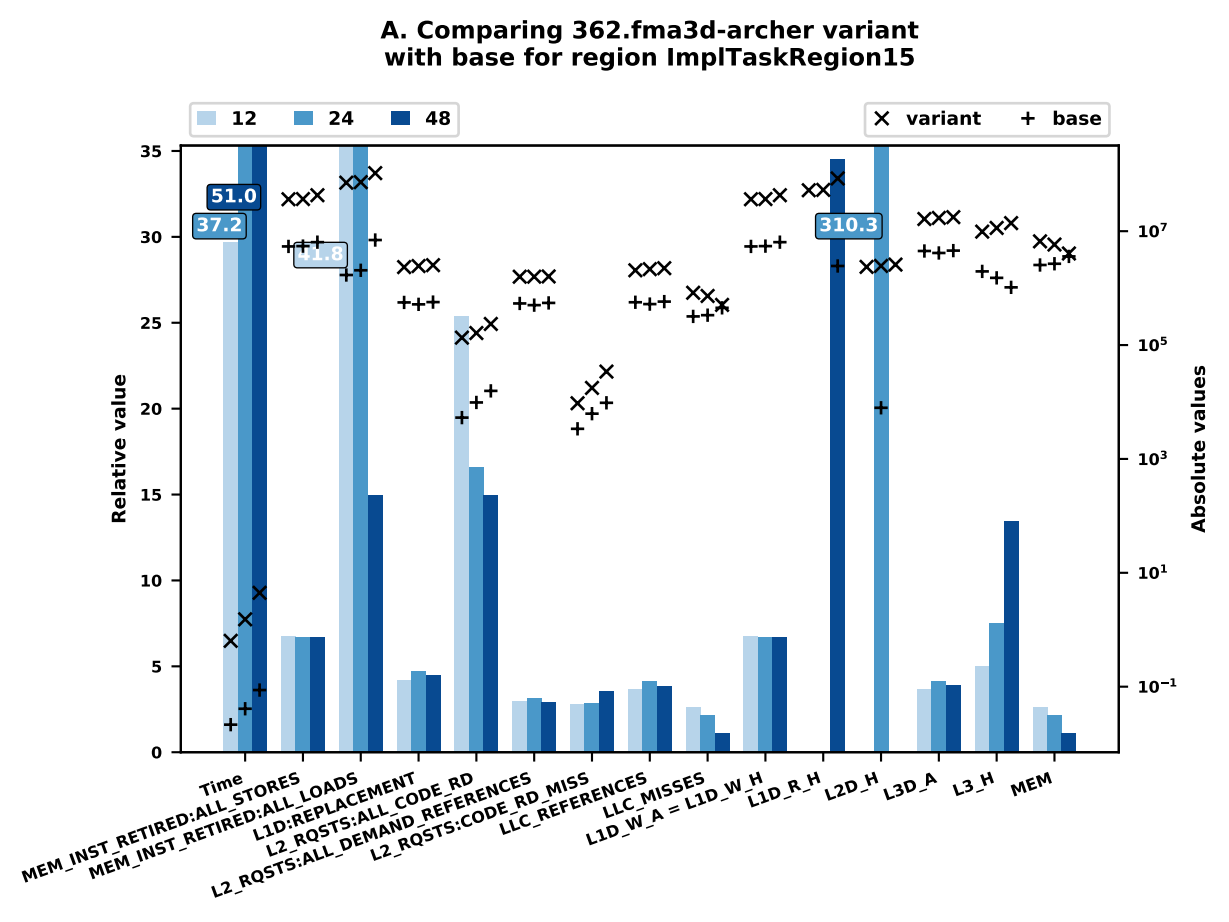

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion15
12
24
48
variant
base
Relative value
Absolute values
51.3
37.1
41.4
285.8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

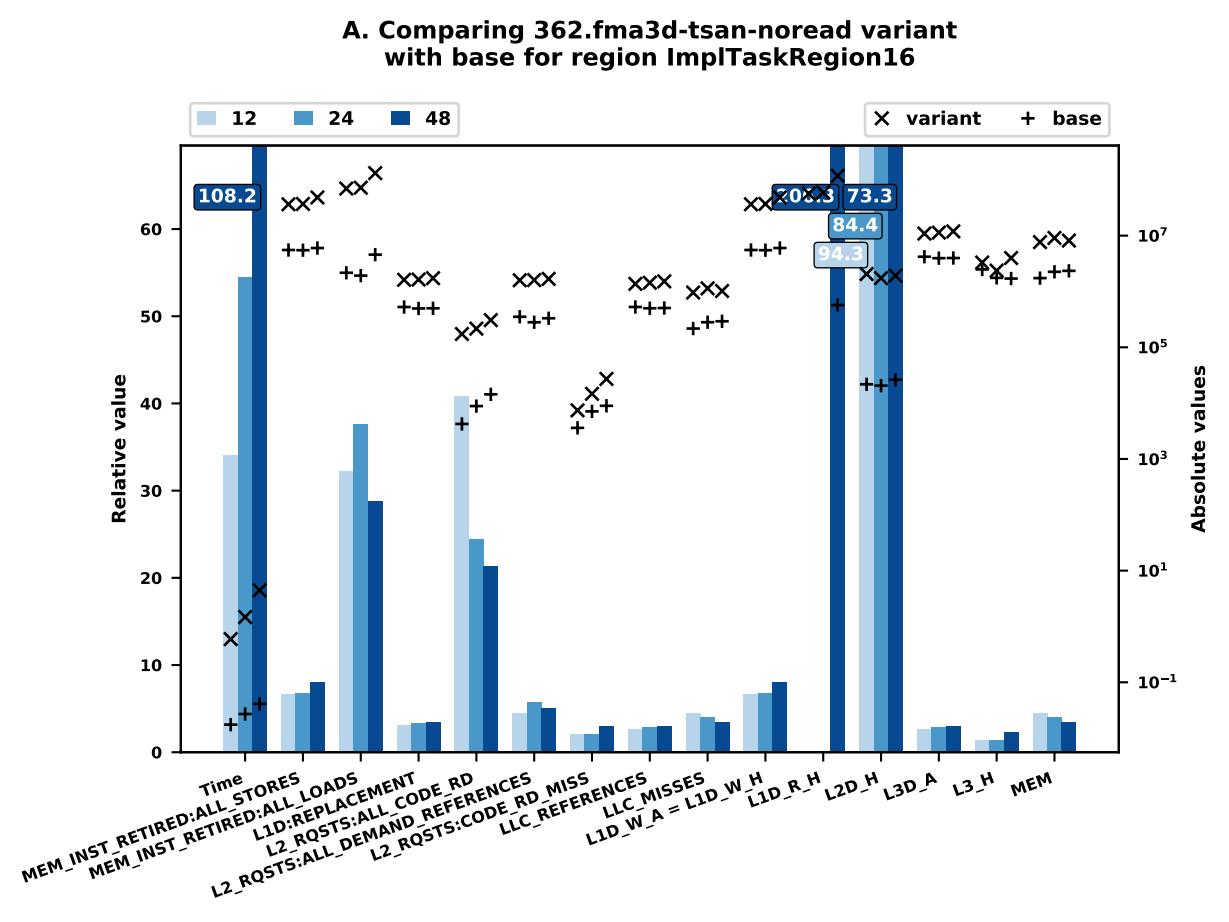

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion15
12
24
48
variant
base
Relative value
Absolute values
50.9
37.2
41.7
368.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

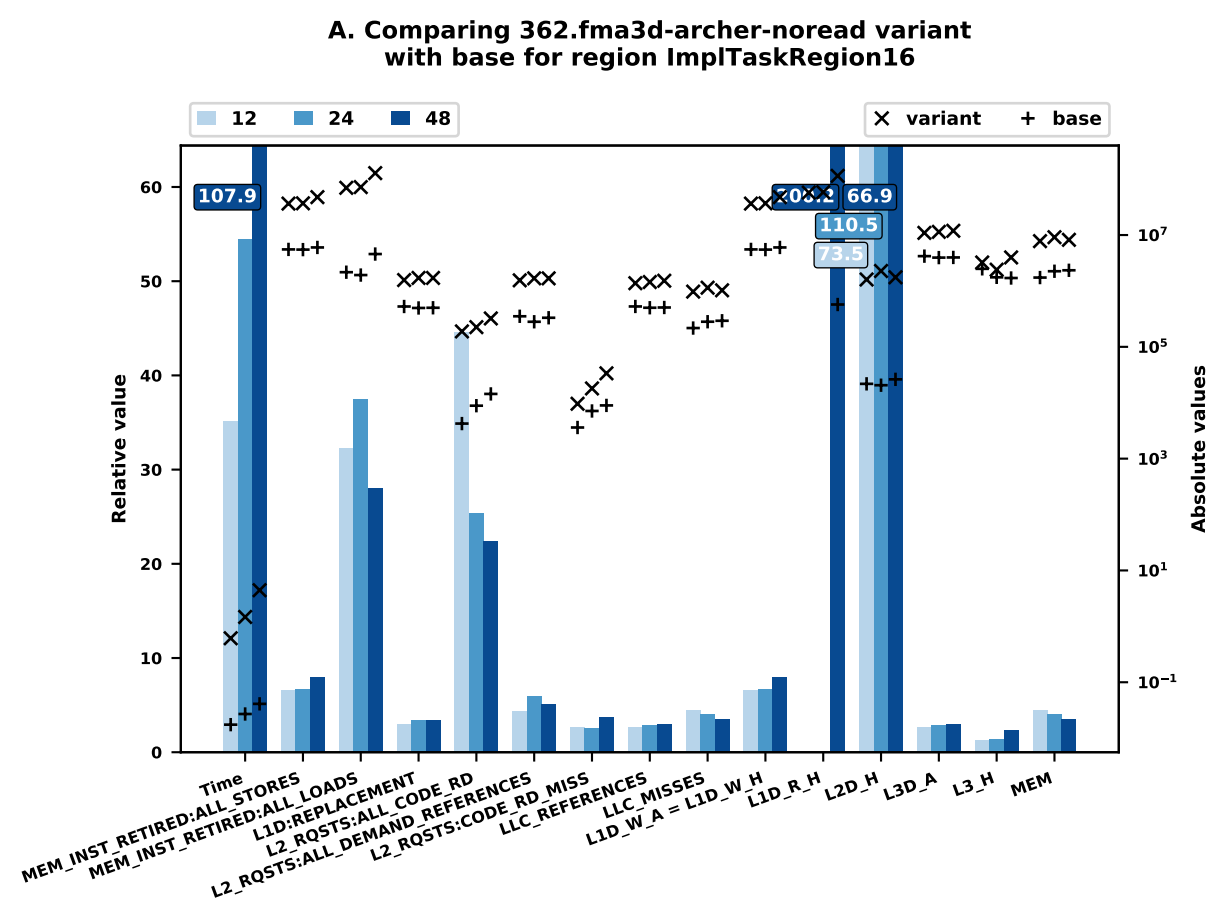

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion15
12
24
48
variant
base
51.3
45.1
39.8
329.5
Relative value
Absolute values
0
5
10
15
20
25
30
35
40
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

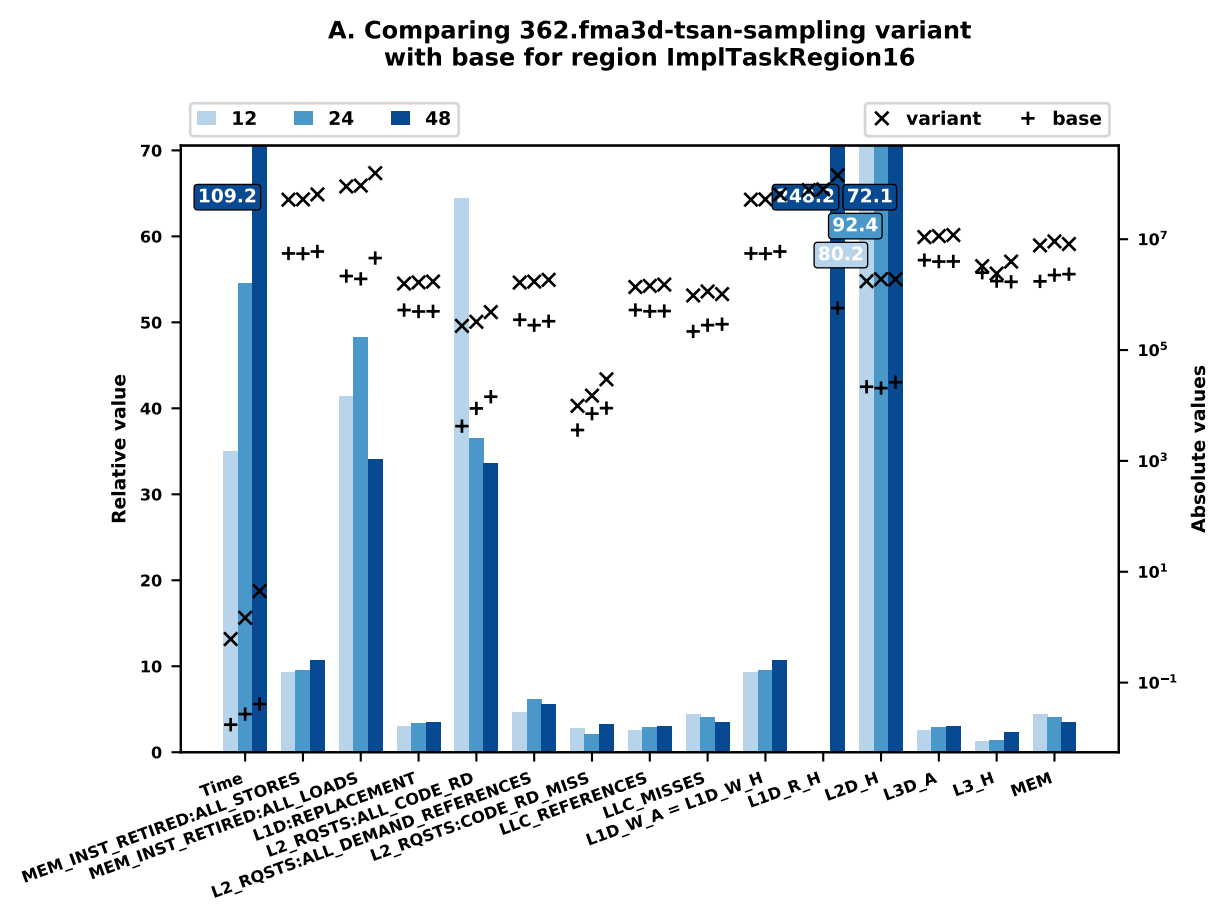

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion15
12
24
48
variant
base
Relative value
Absolute values
51.3
45.5
326.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

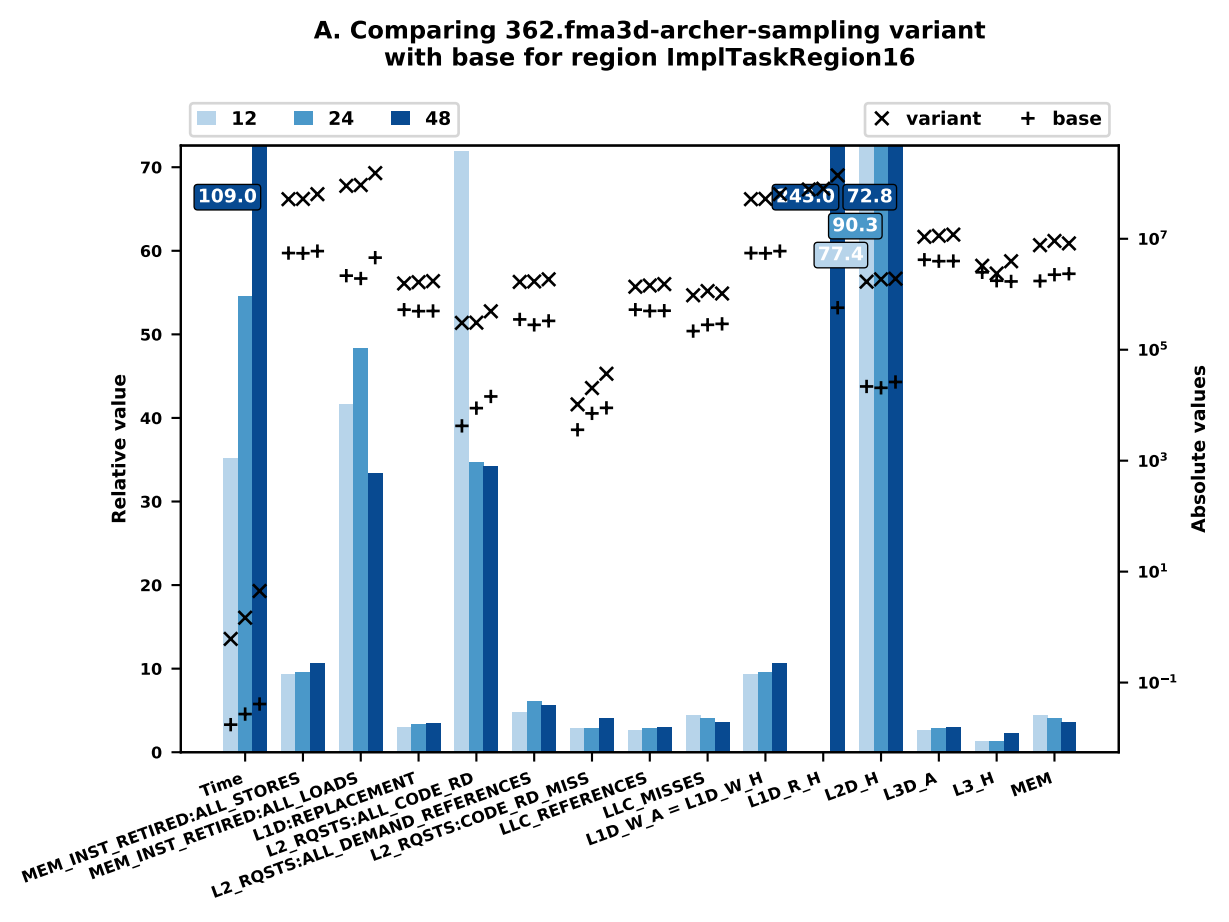

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion15
12
24
48
variant
base
Relative value
Absolute values
51.2
37.2
42.0
283.1
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

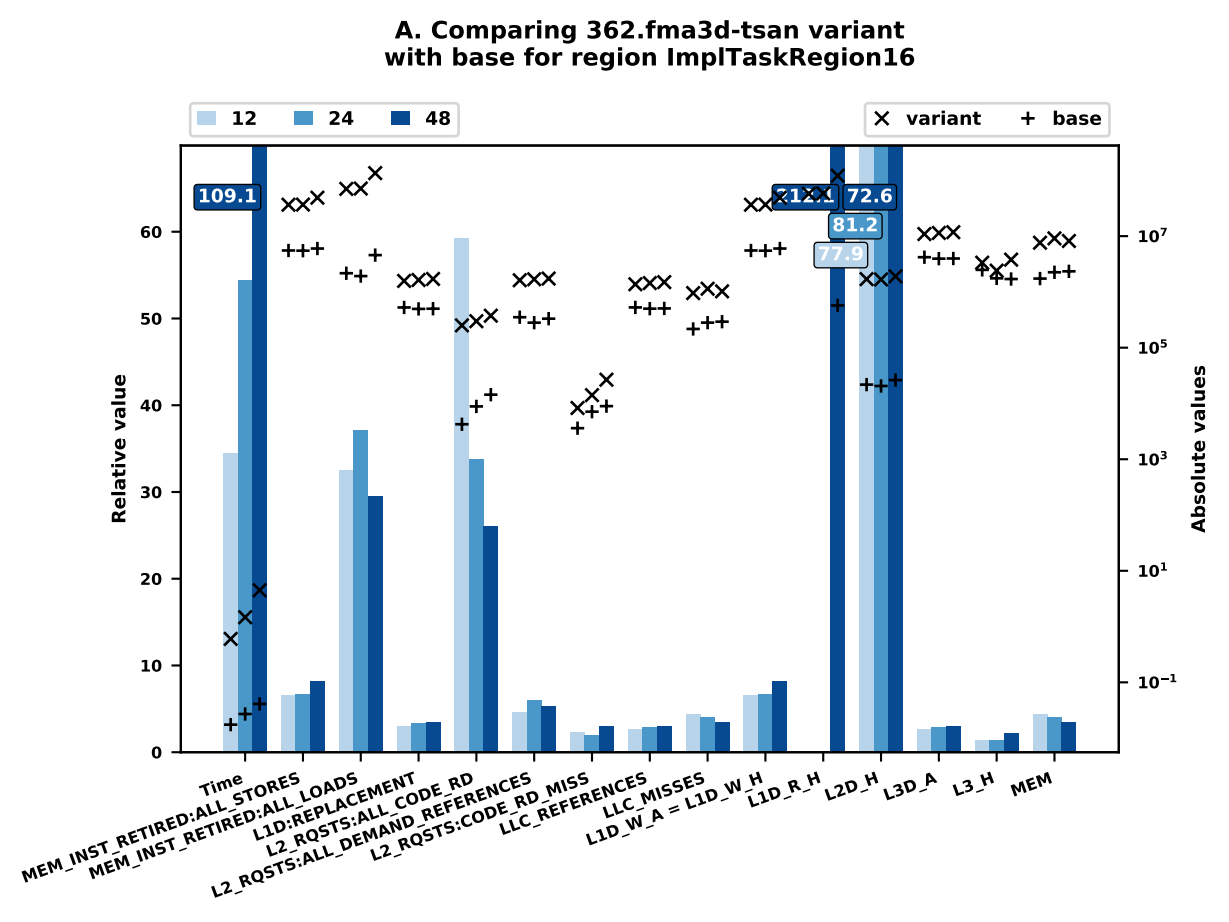

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion15
12
24
48
variant
base
Relative value
Absolute values
51.0
37.2
41.8
310.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

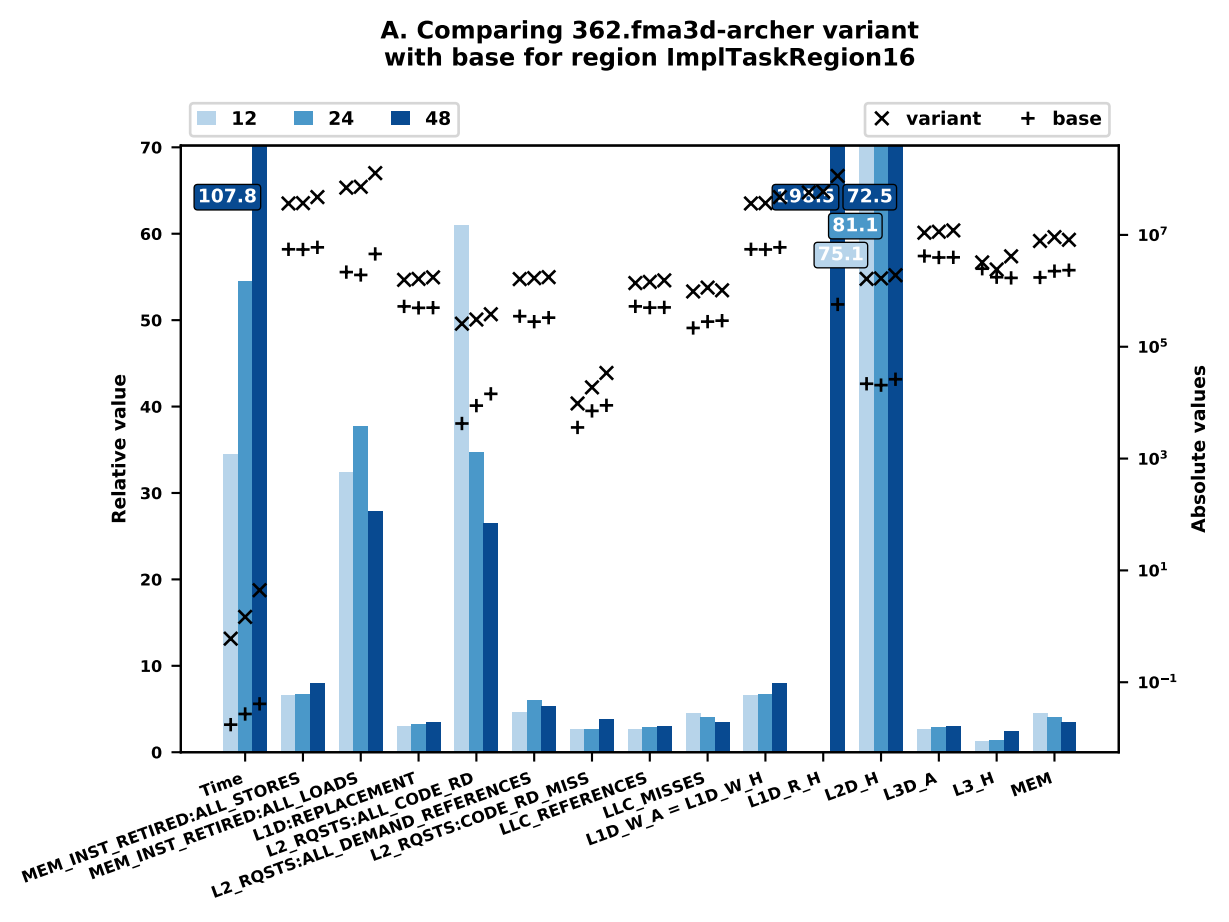

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion16
12
24
48
variant
base
108.2
73.3
84.4
94.3
Relative value
Absolute values
0
10
20
30
40
50
60
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

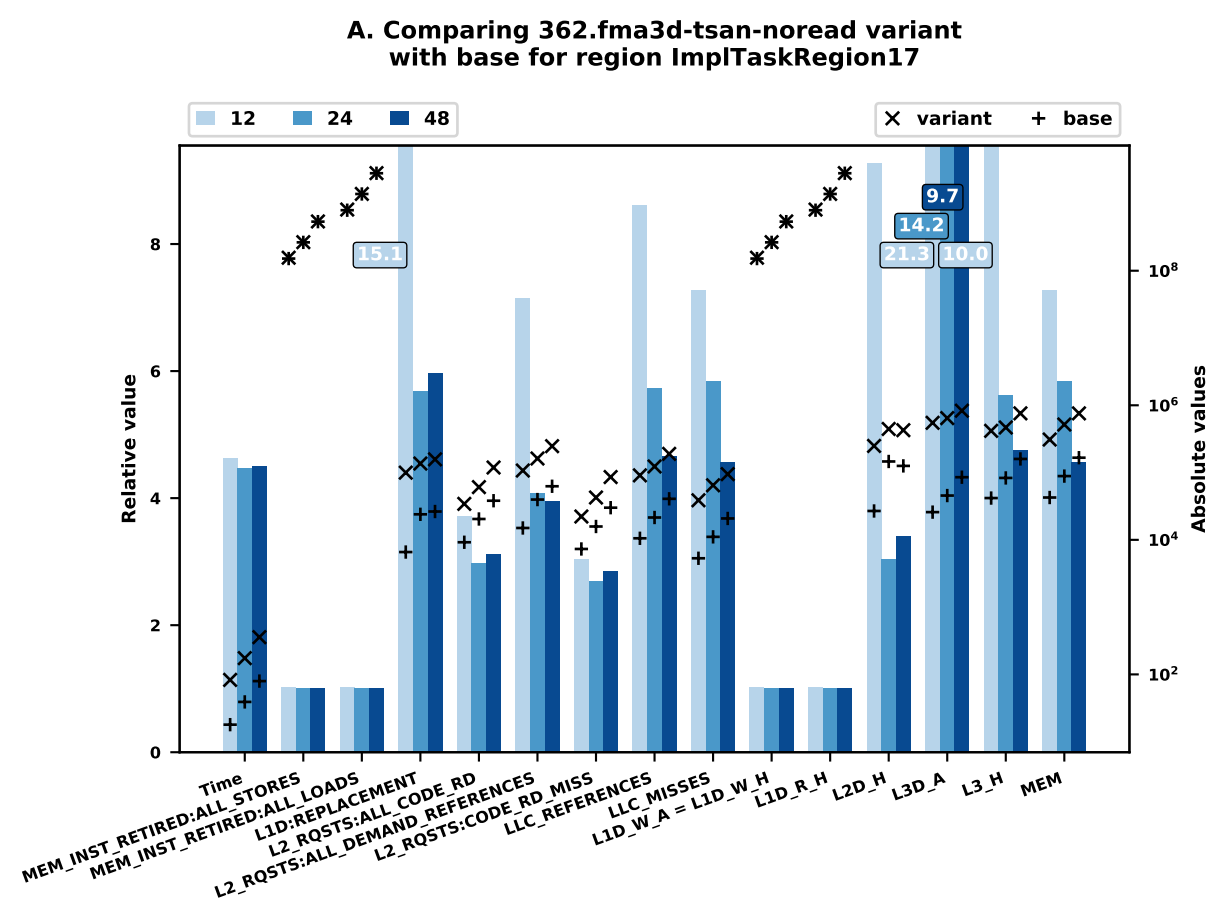

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion16
12
24
48
variant
base
107.9
66.9
110.5
73.5
Relative value
Absolute values
0
10
20
30
40
50
60
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

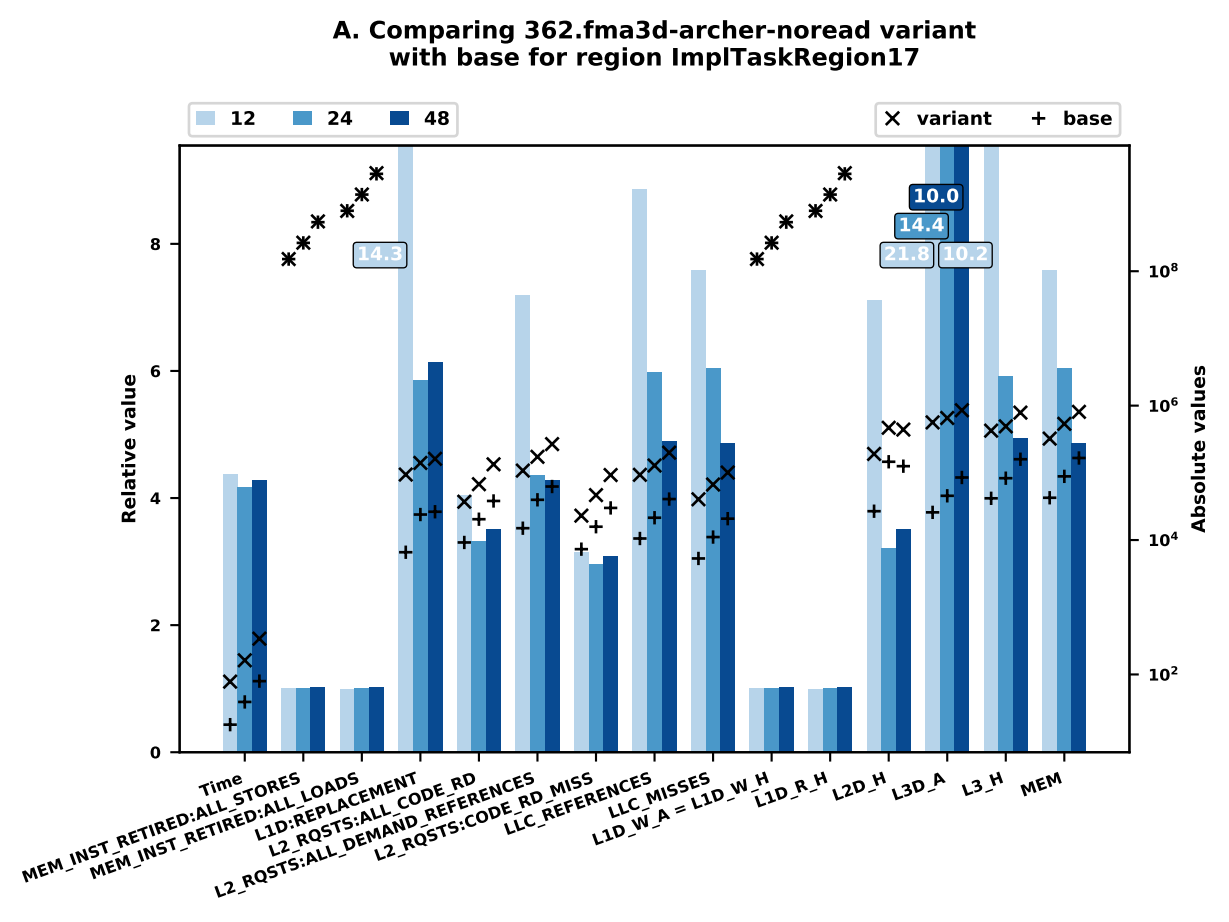

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion16
12
24
48
variant
base
Relative value
Absolute values
109.2
248.2
72.1
92.4
80.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

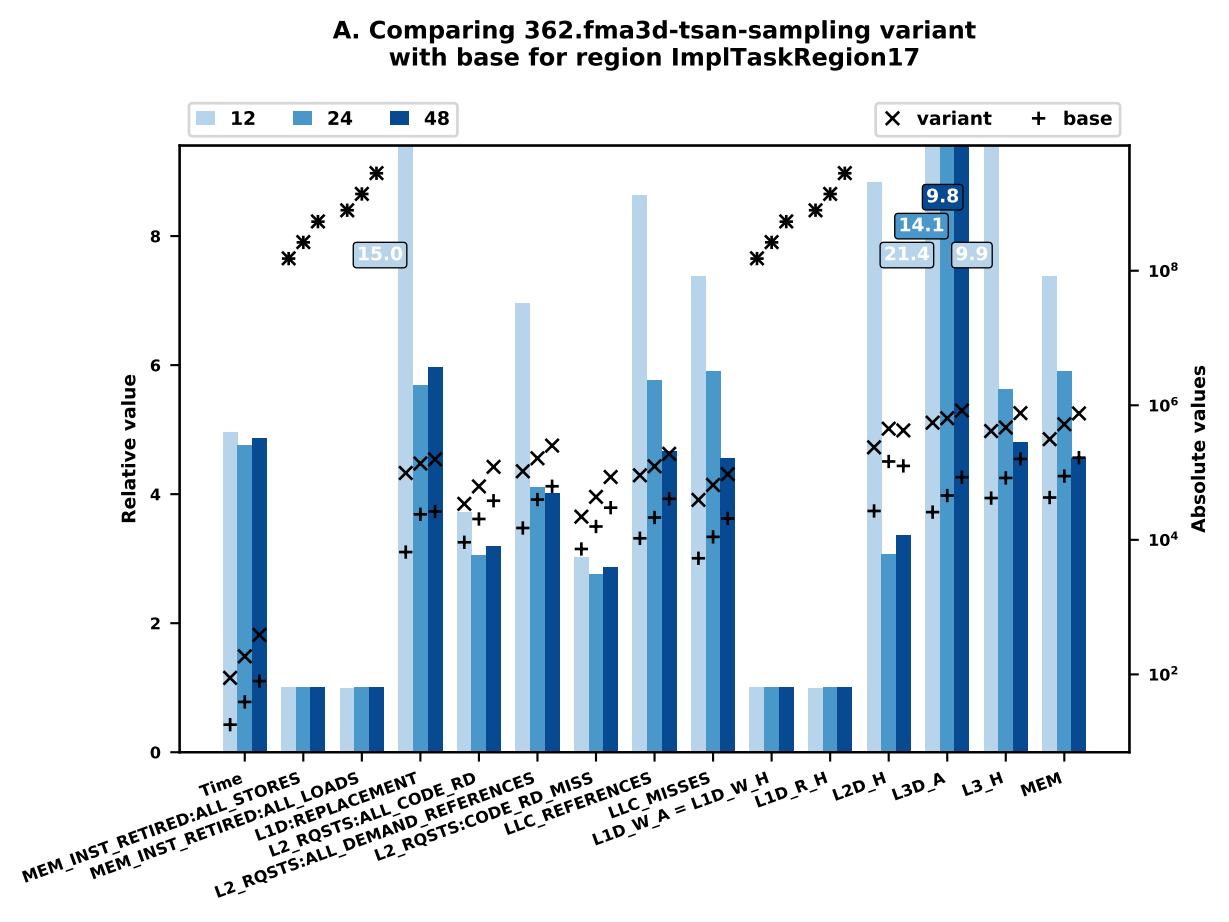

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion16
12
24
48
variant
base
Relative value
Absolute values
109.0
243.0
72.8
90.3
77.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

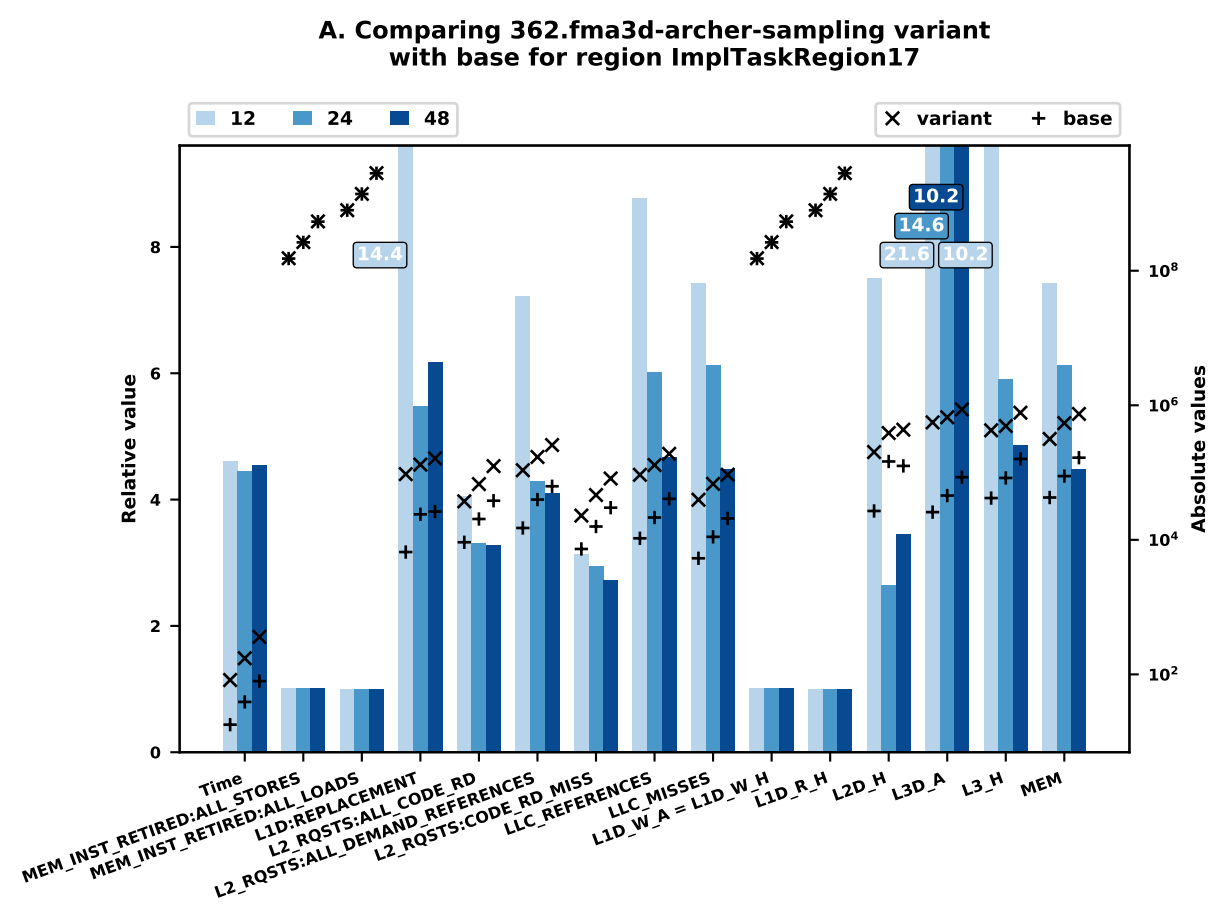

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion16
12
24
48
variant
base
109.1
72.6
81.2
77.9
Relative value
Absolute values
0
10
20
30
40
50
60
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

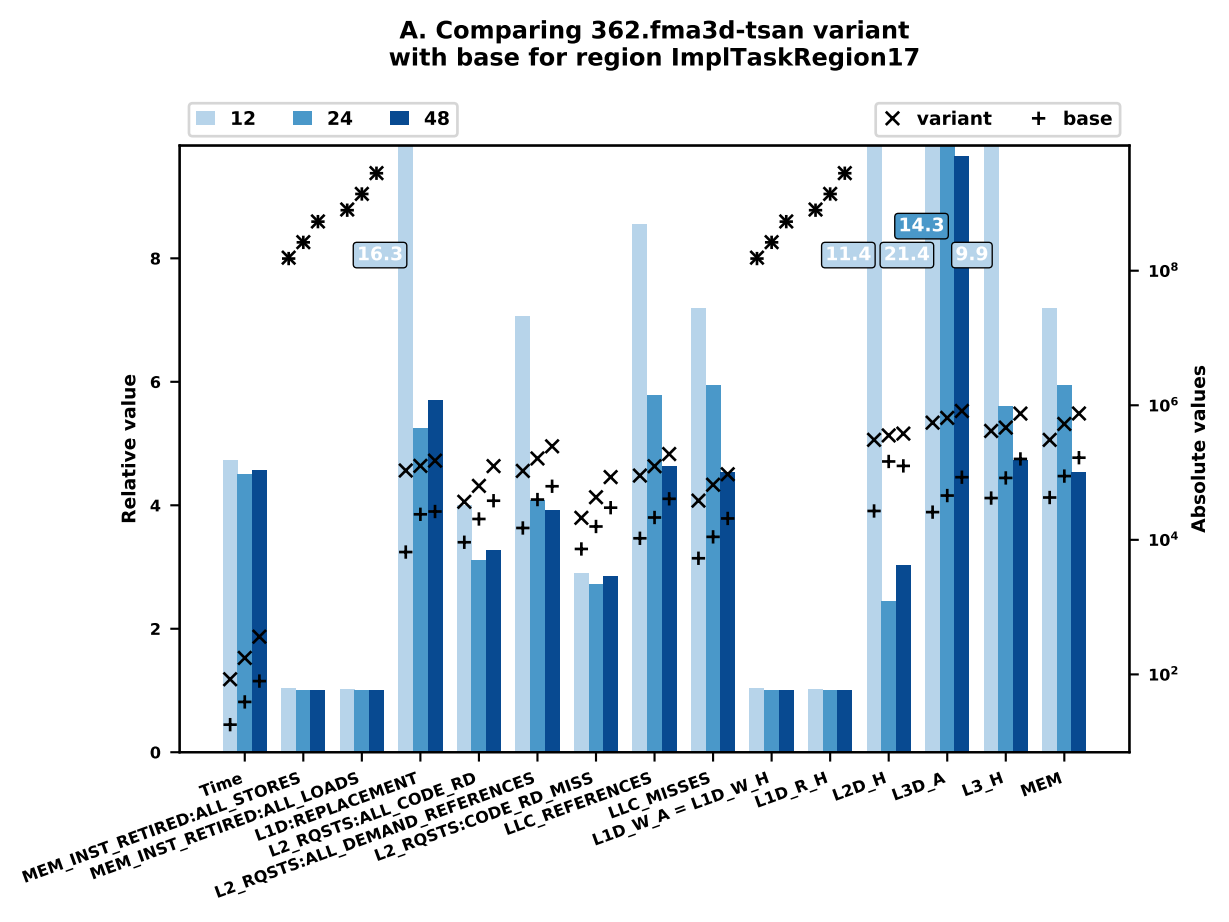

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion16
12
24
48
variant
base
107.8
72.5
81.1
75.1
Relative value
Absolute values
0
10
20
30
40
50
60
70
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

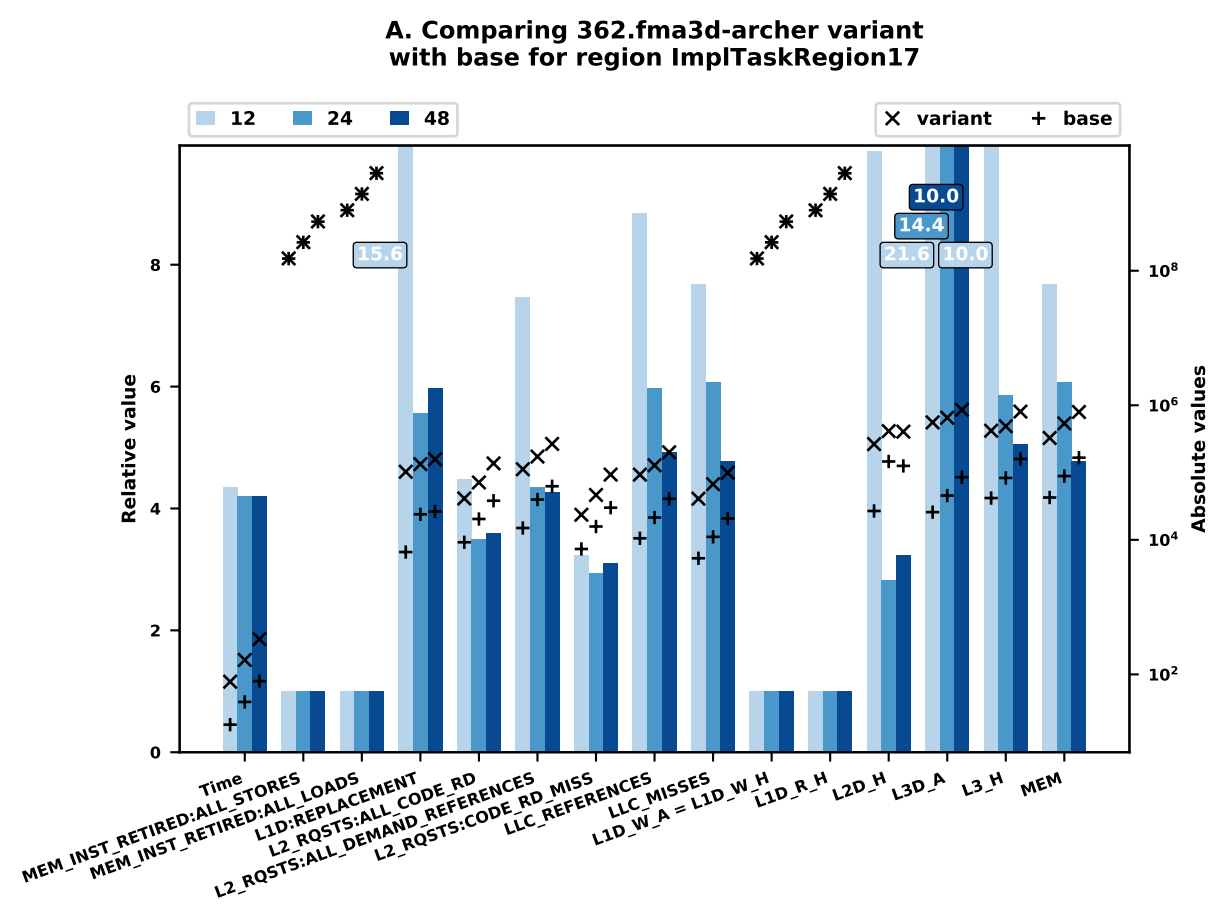

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion17
12
24
48
variant
base
Relative value
Absolute values
0
2
4
6
8
10^2
10^4
10^6
10^8
15.1
9.7
14.2
21.3
10.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

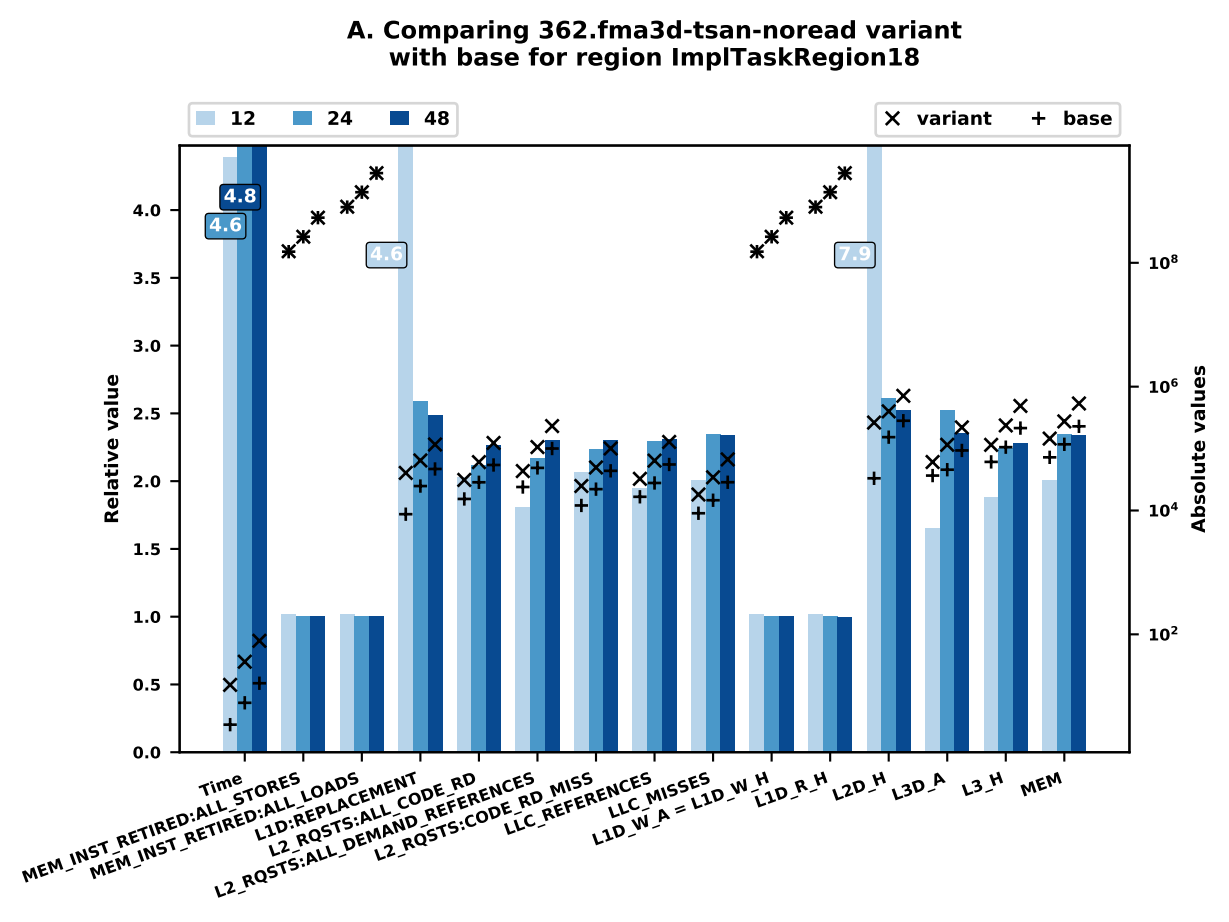

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion17
12
24
48
variant
base
Relative value
Absolute values
14.3
10.0
14.4
21.8
10.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

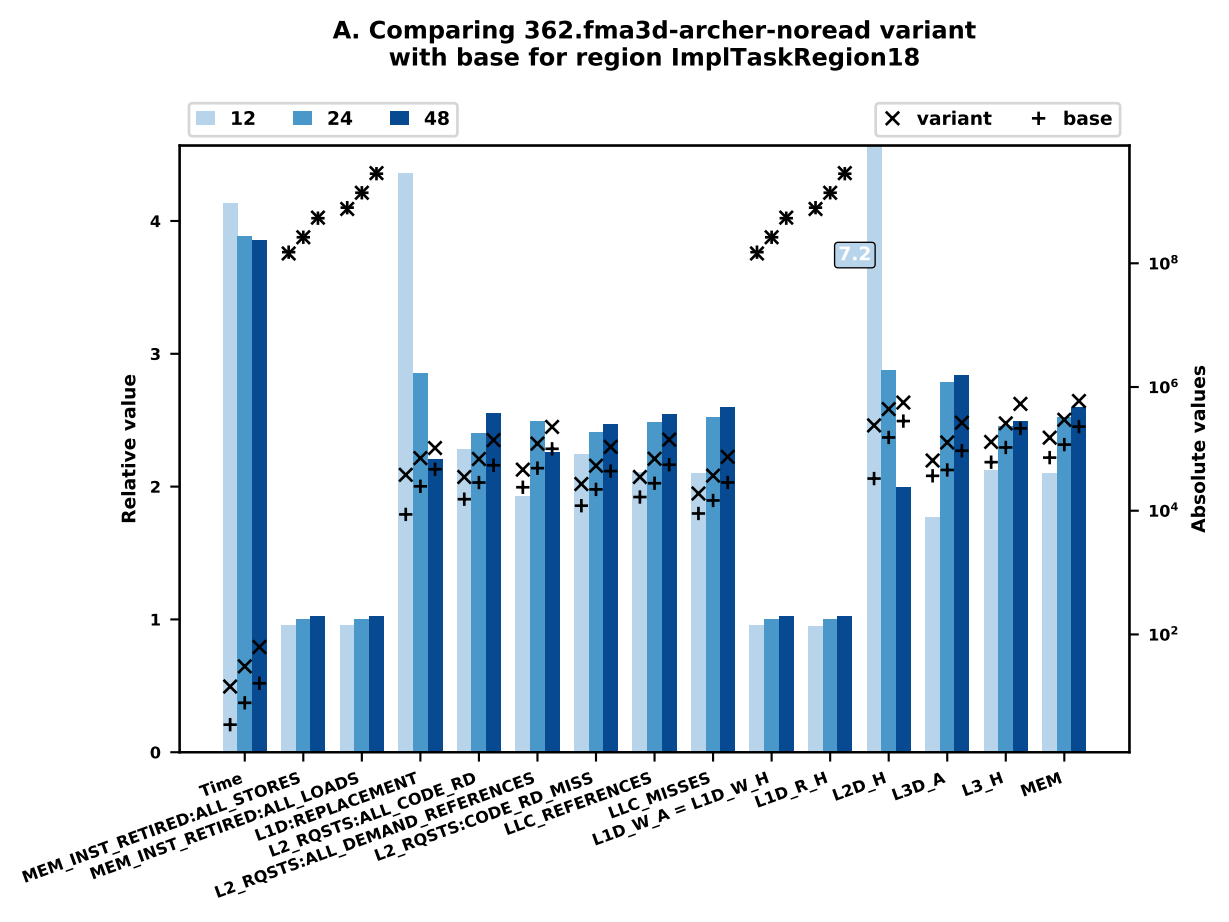

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion17
12
24
48
variant
base
Relative value
Absolute values
0
2
4
6
8
10^2
10^4
10^6
10^8
15.0
21.4
14.1
9.8
9.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

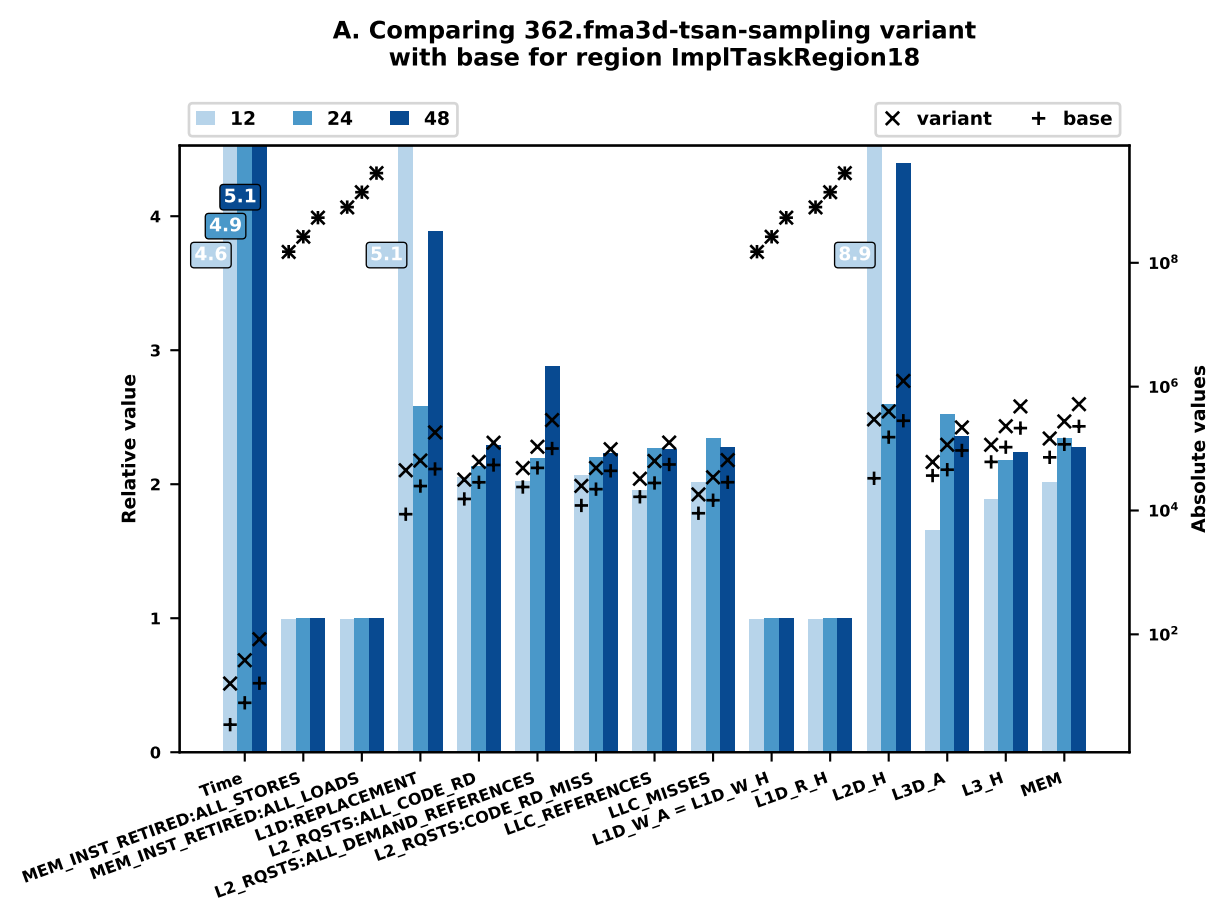

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion17
12
24
48
variant
base
Relative value
Absolute values
0
2
4
6
8
10^2
10^4
10^6
10^8
14.4
10.2
14.6
21.6
10.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

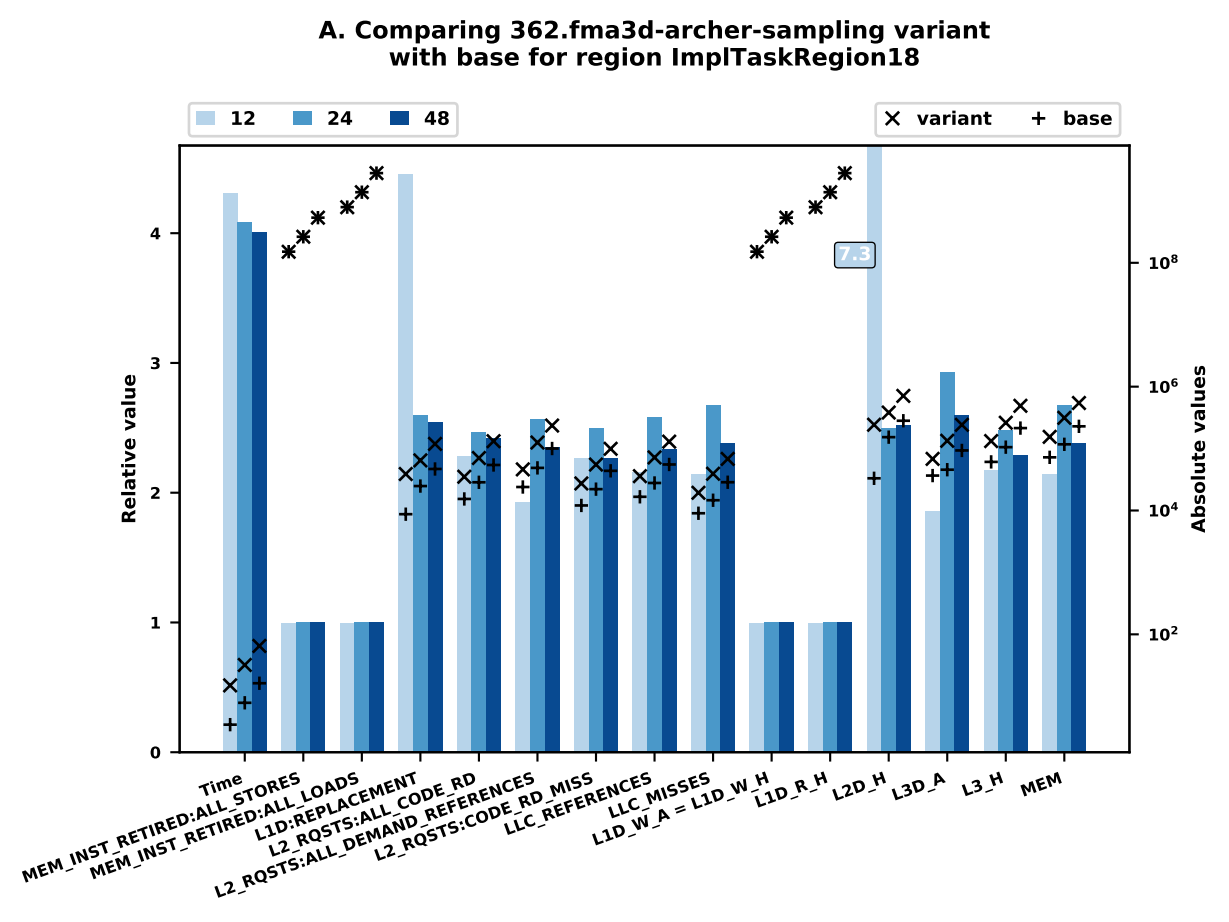

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion17
12
24
48
variant
base
16.3
11.4
21.4
14.3
9.9
Relative value
Absolute values
0
2
4
6
8
10^2
10^4
10^6
10^8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

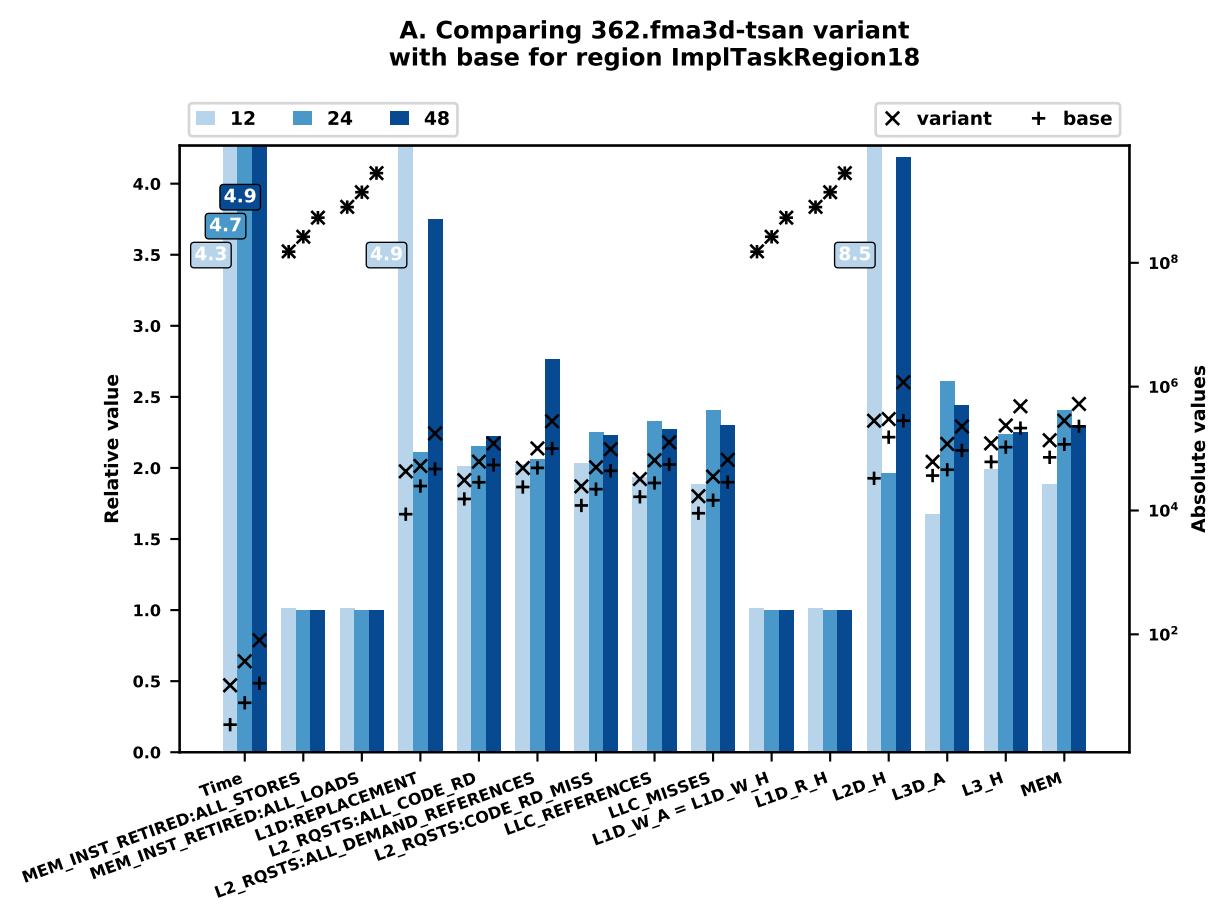

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion17
12
24
48
variant
base
Relative value
Absolute values
0
2
4
6
8
10^2
10^4
10^6
10^8
15.6
10.0
14.4
21.6
10.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

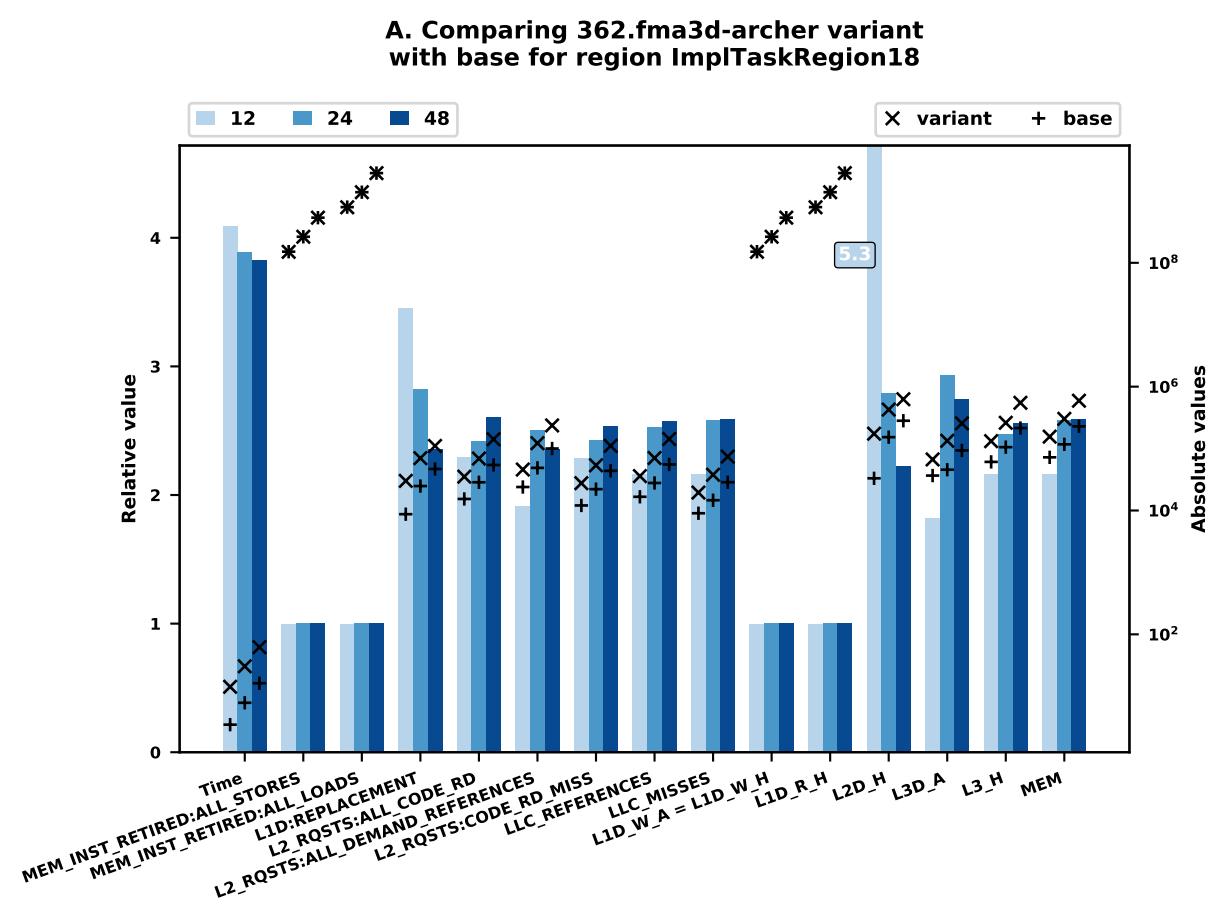

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion18
12
24
48
variant
base
Relative value
Absolute values
4.8
4.6
4.6
7.9
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
10^2
10^4
10^6
10^8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

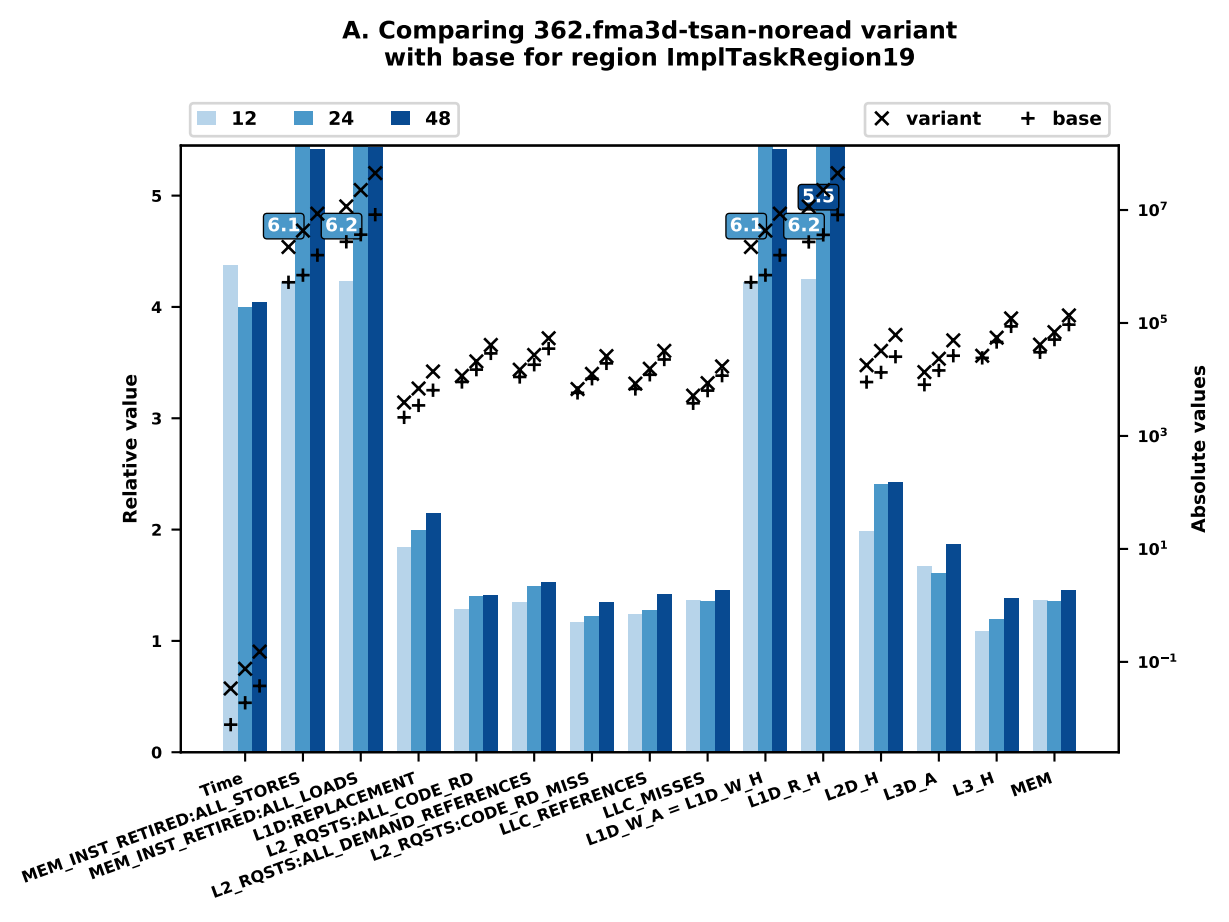

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion18
12
24
48
variant
base
7.2
Relative value
Absolute values
0
1
2
3
4
10^2
10^4
10^6
10^8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

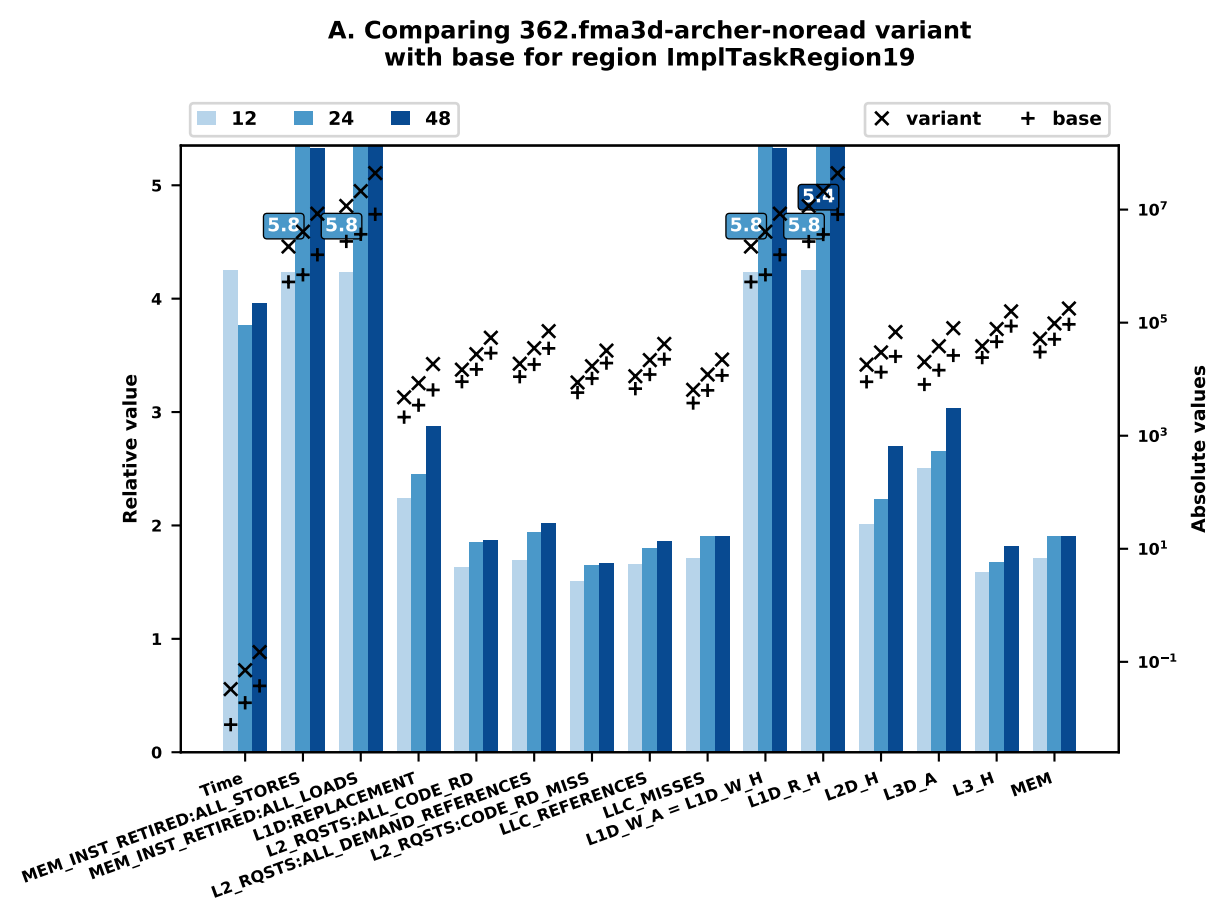

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion18
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^2
10^4
10^6
10^8
4.6
4.9
5.1
5.1
8.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

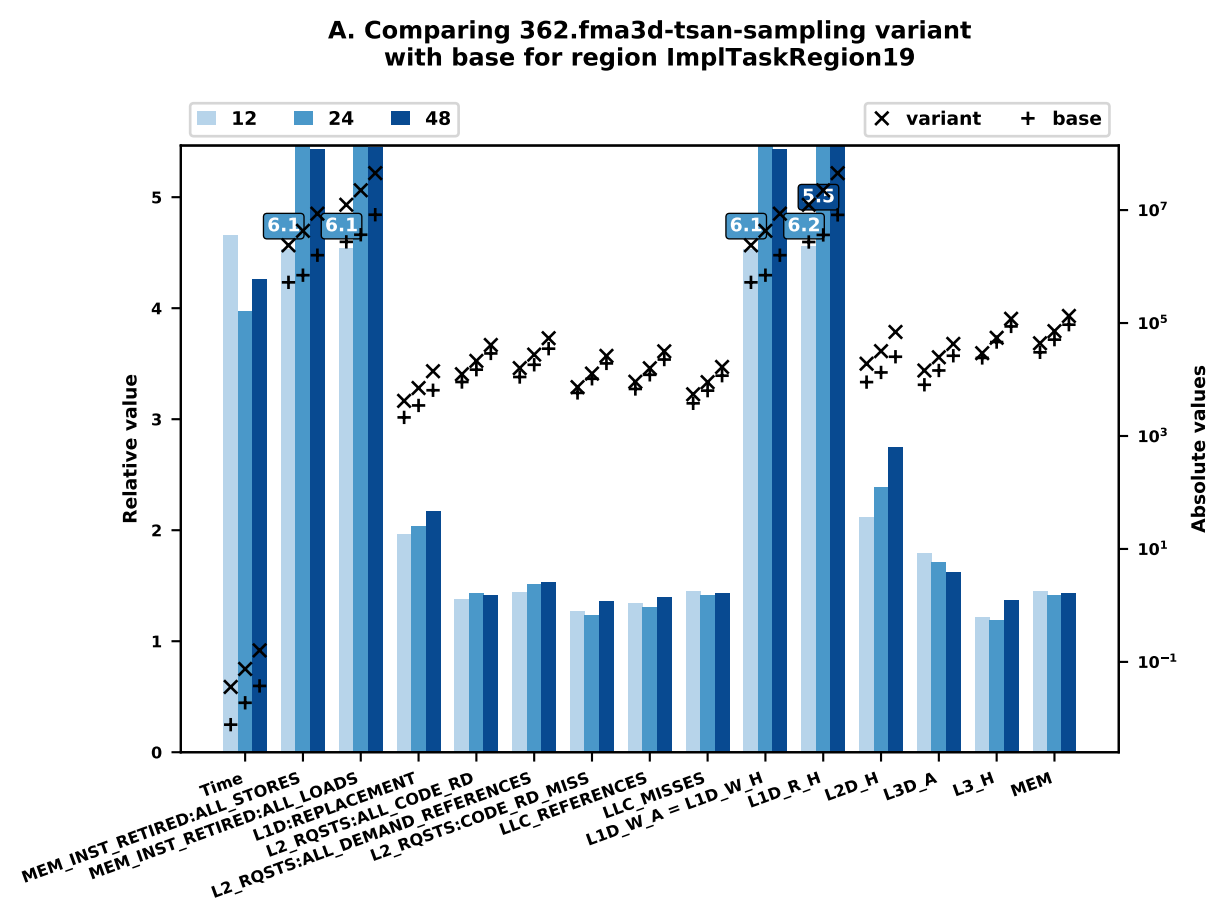

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion18
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^2
10^4
10^6
10^8
7.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

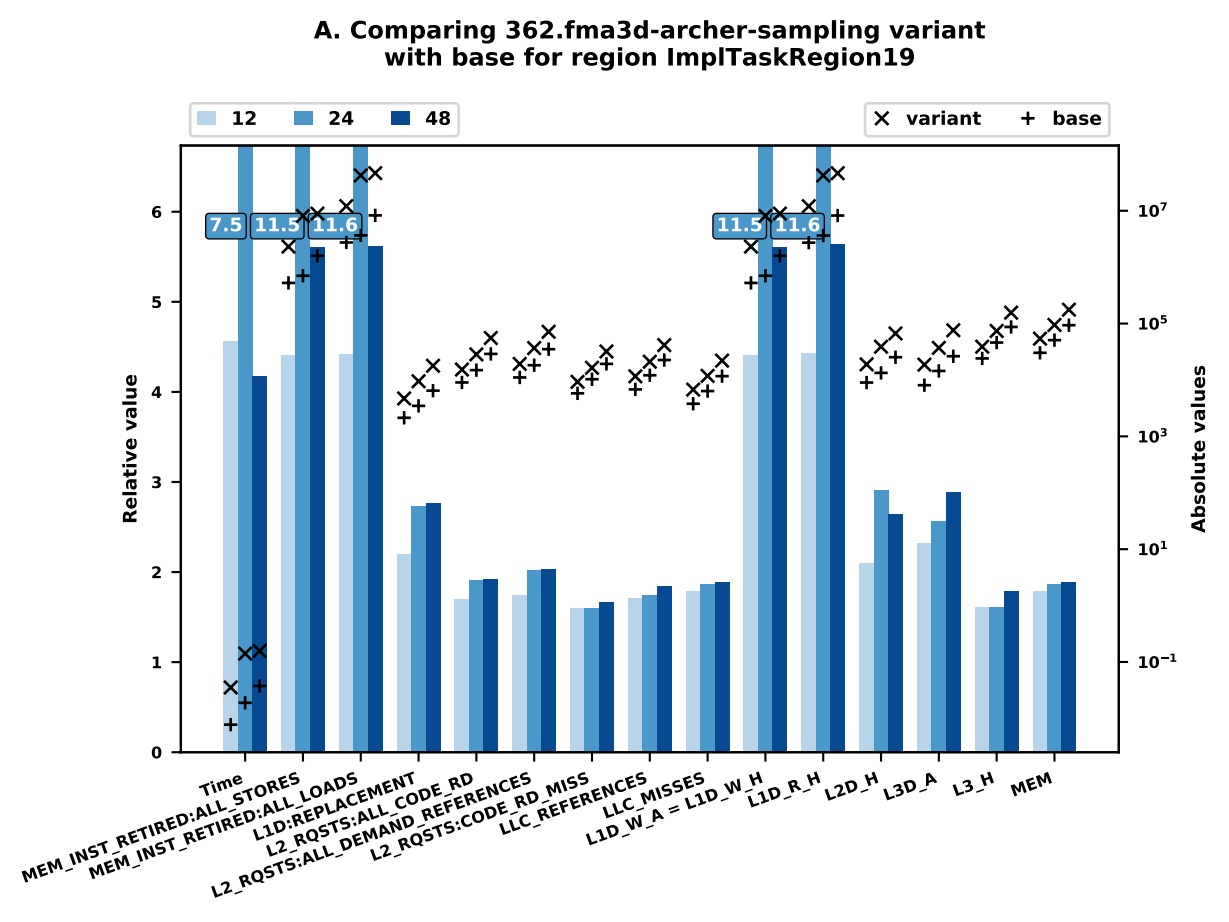

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion18
12
24
48
variant
base
Relative value
Absolute values
4.3
4.7
4.9
4.9
8.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

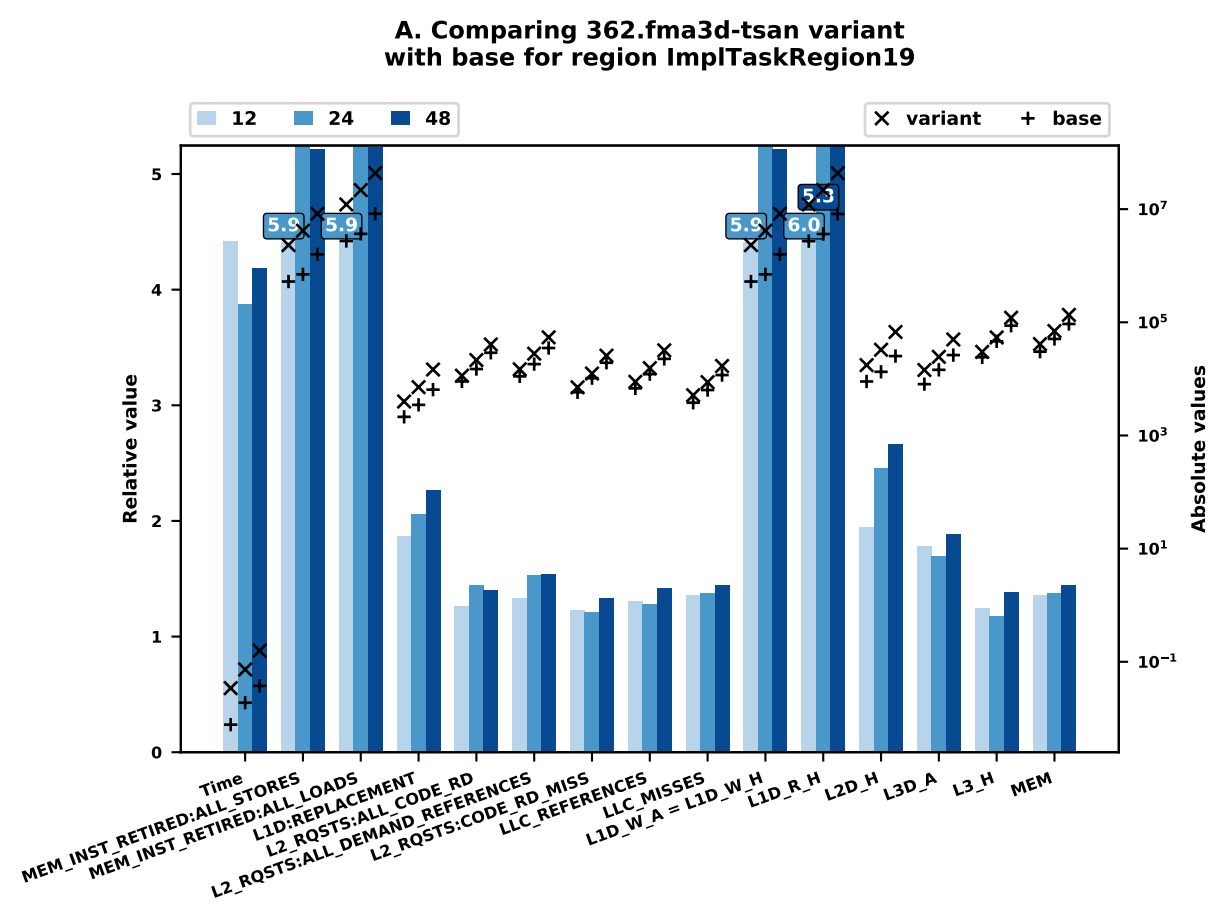

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion18
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^2
10^4
10^6
10^8
5.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

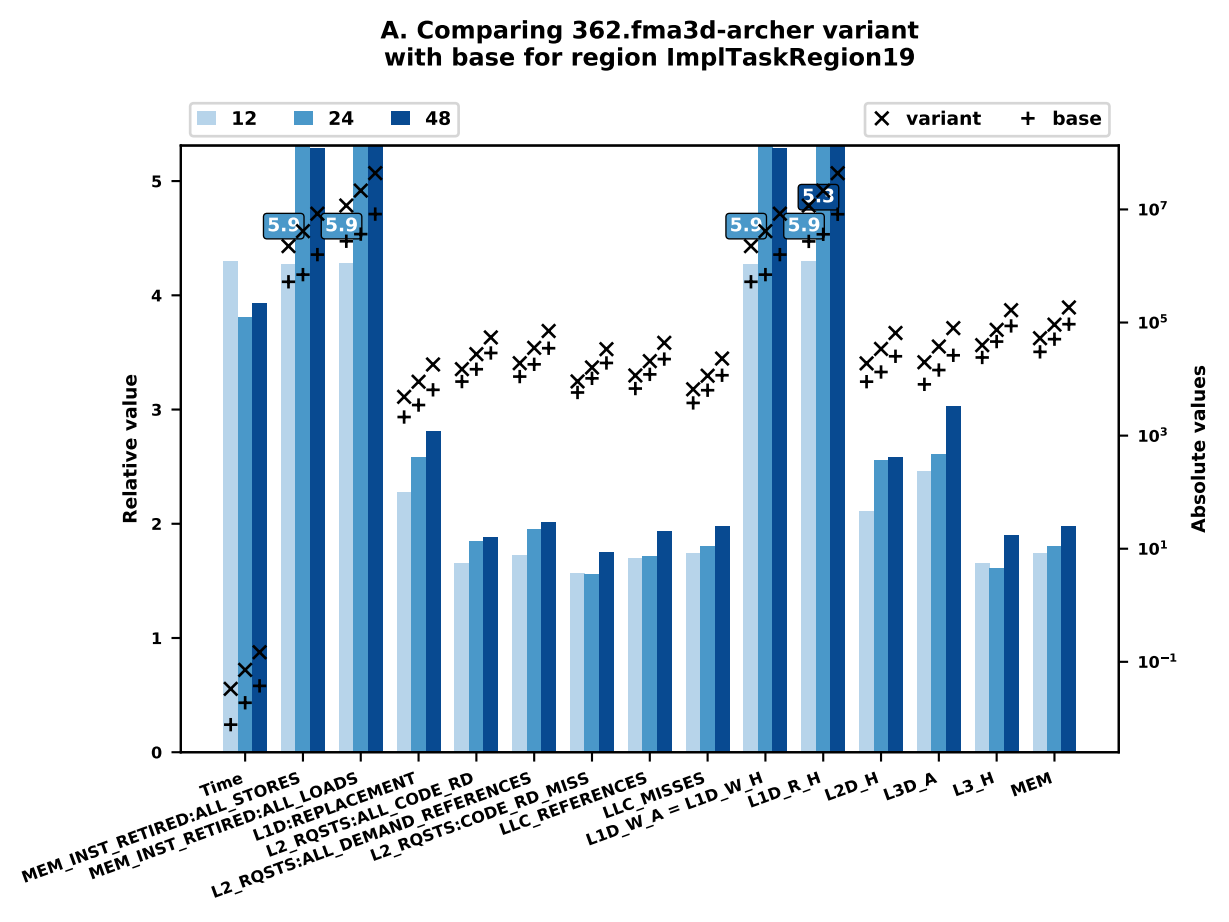

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion19
12
24
48
variant
base
6.1
6.2
6.1
6.2
5.5
Relative value
Absolute values
0
1
2
3
4
5
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

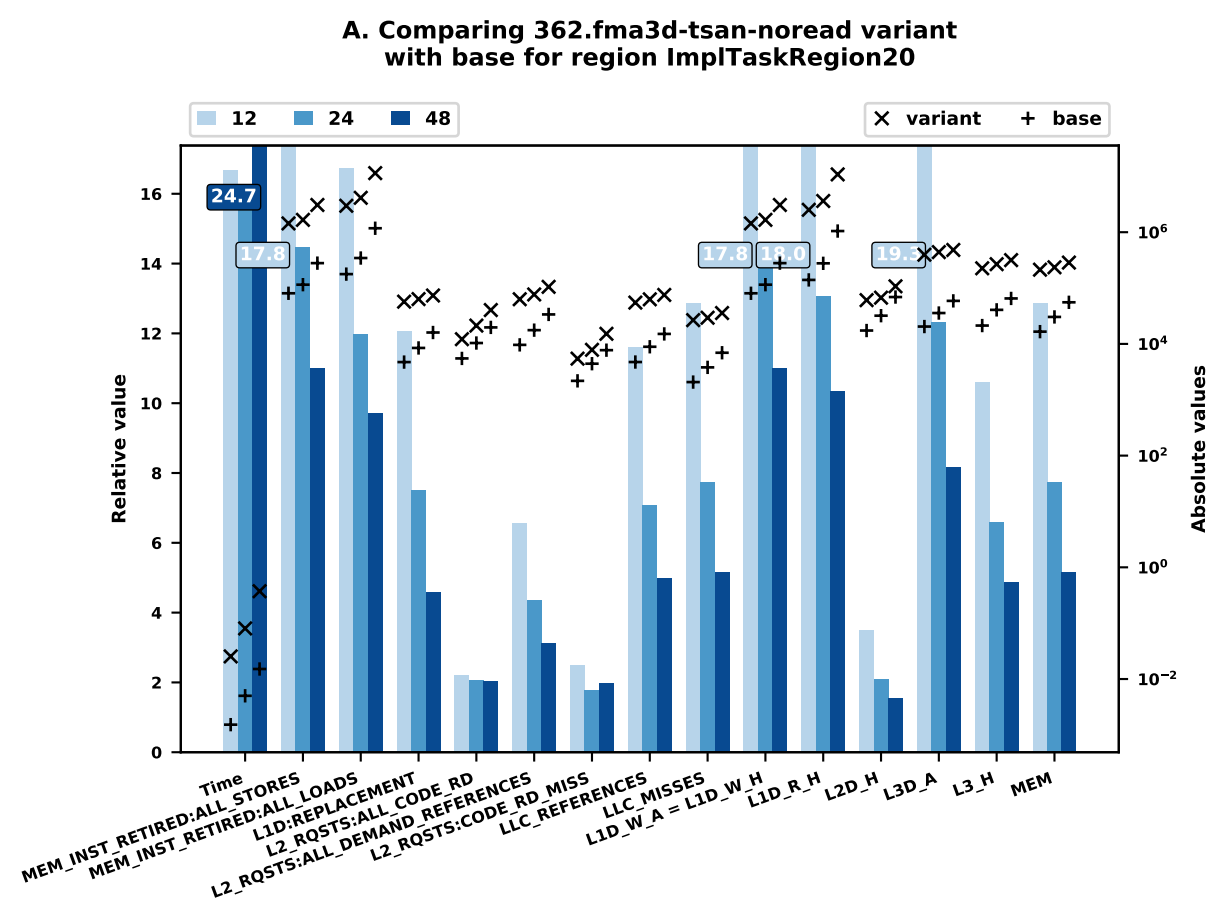

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion19
12
24
48
variant
base
Relative value
Absolute values
5.8
5.8
5.8
5.8
5.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

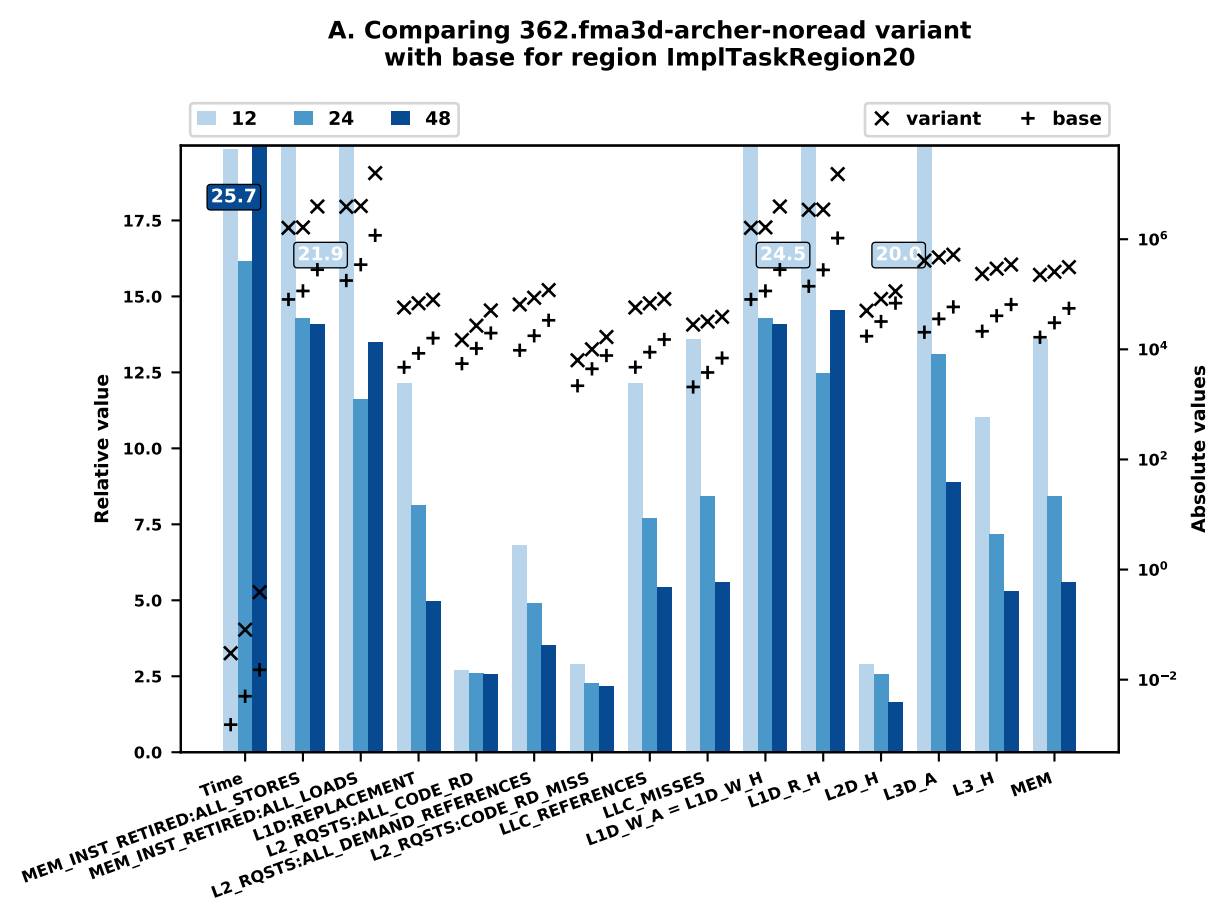

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion19
12
24
48
variant
base
Relative value
Absolute values
6.1
6.1
6.1
6.2
5.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

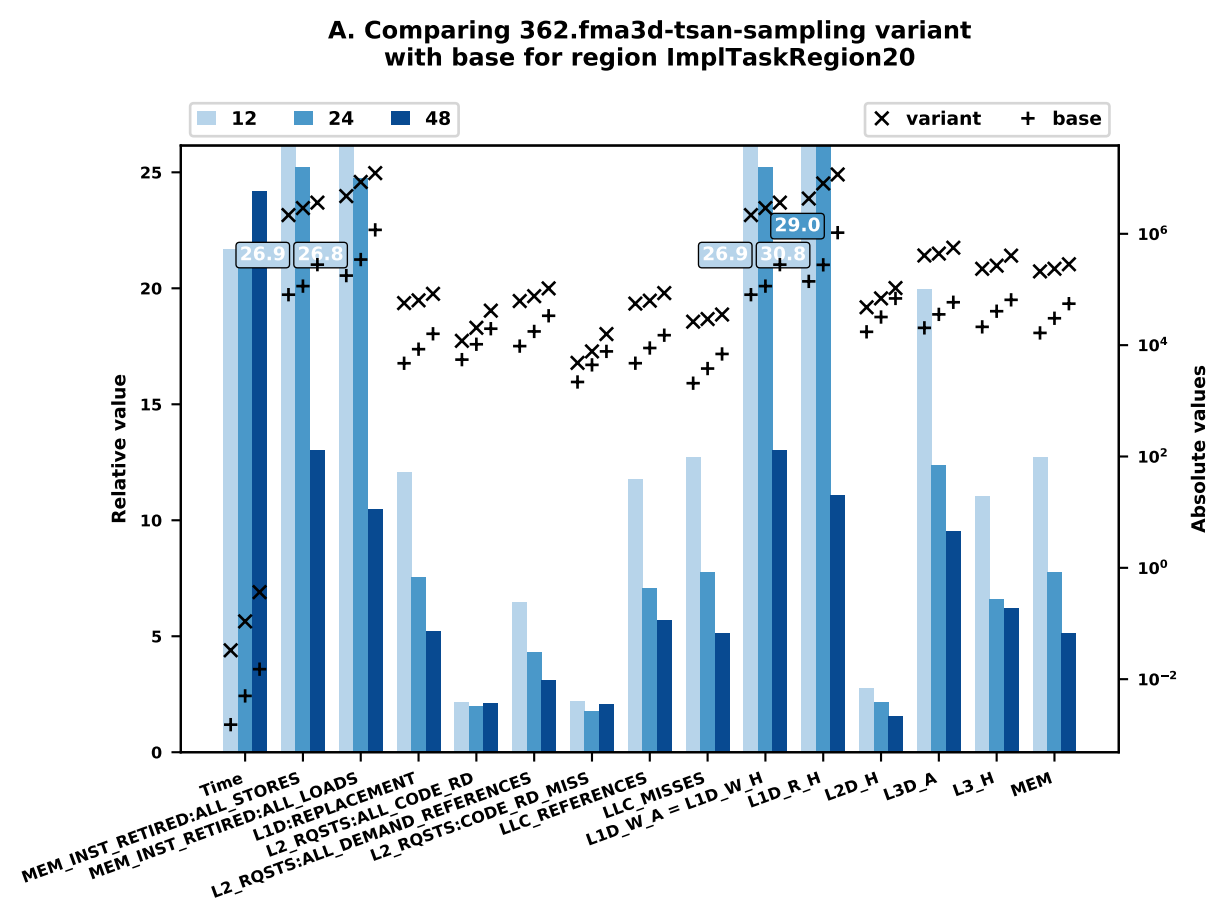

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion19
12
24
48
variant
base
7.5
11.5
11.6
11.5
11.6
Relative value
Absolute values
0
1
2
3
4
5
6
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

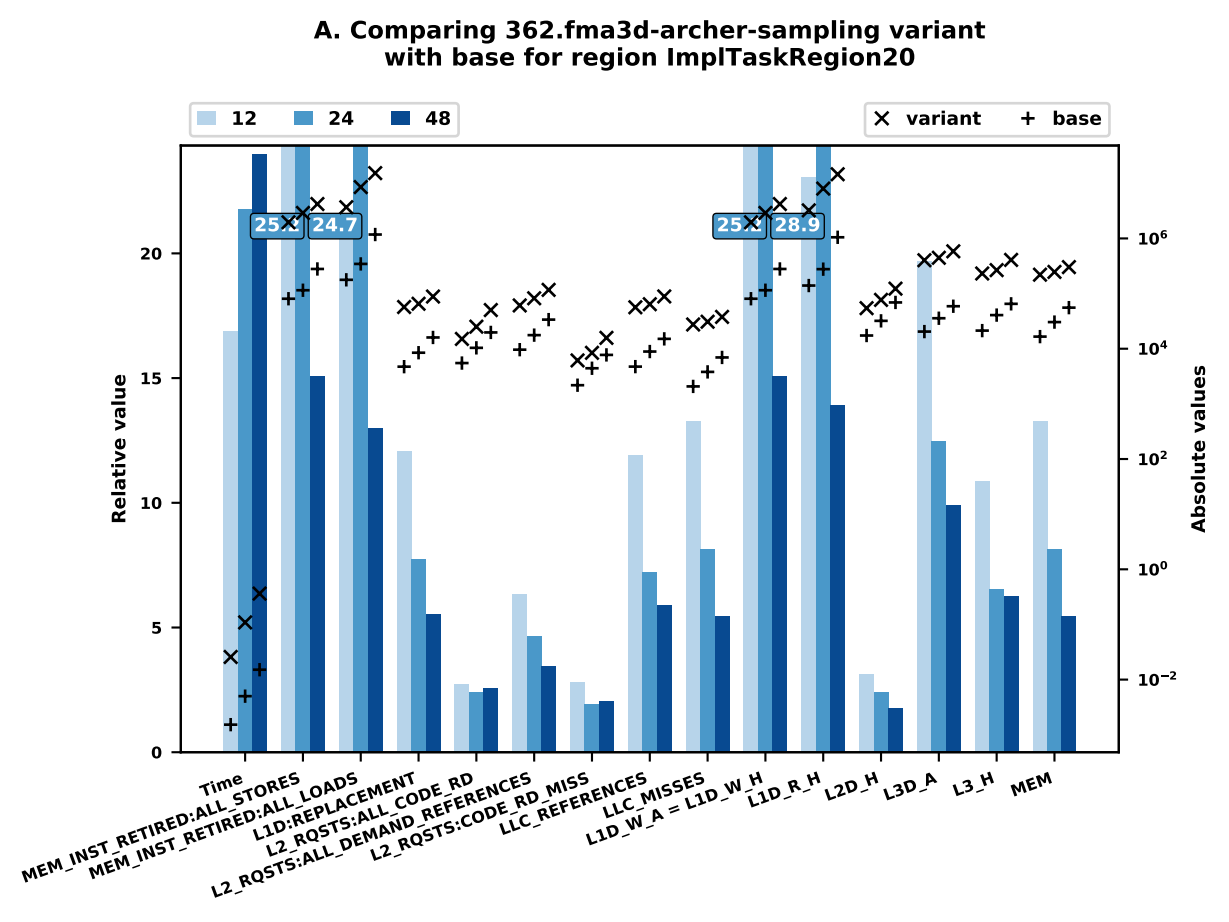

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion19
12
24
48
variant
base
Relative value
Absolute values
5.9
5.9
5.9
6.0
5.3
0
1
2
3
4
5
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

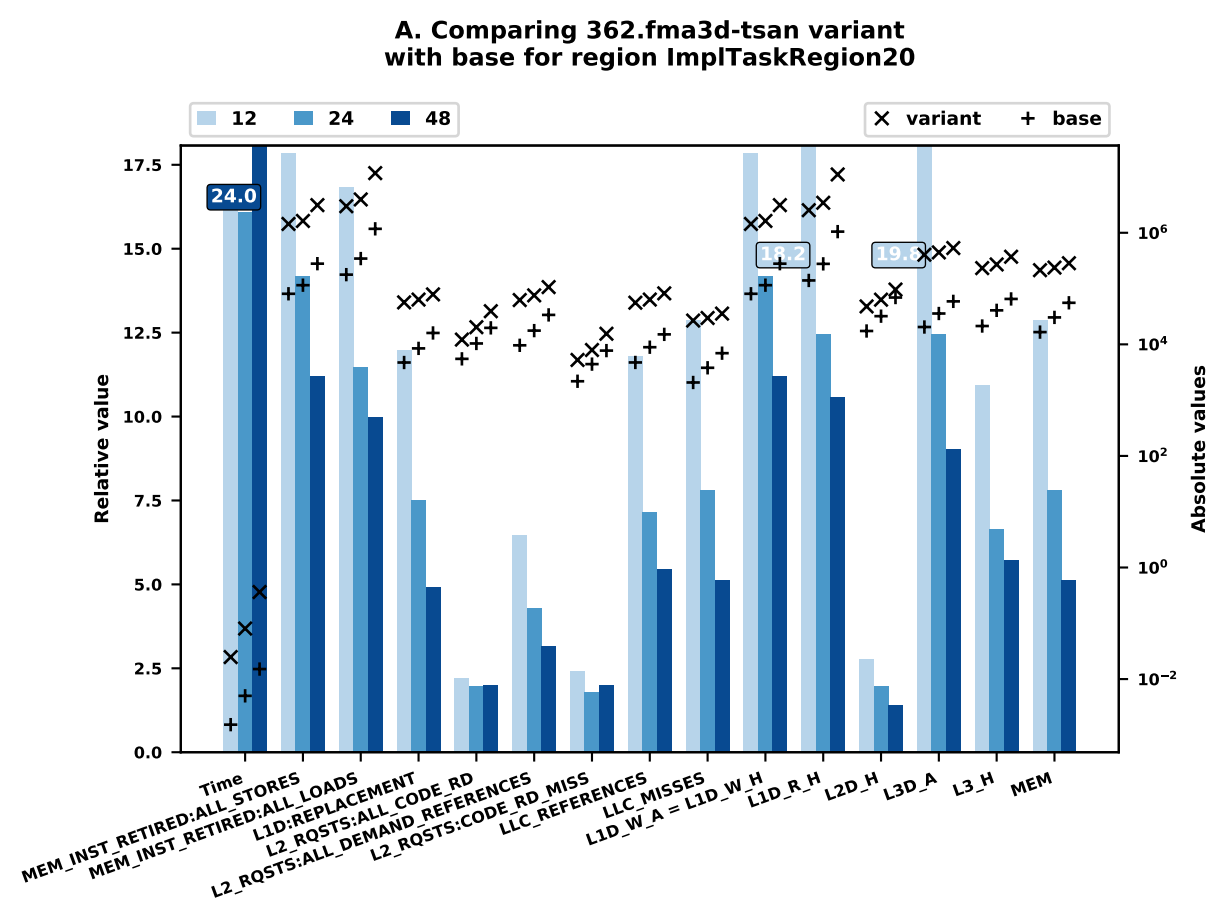

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion19
12
24
48
variant
base
Relative value
Absolute values
5.9
5.9
5.9
5.9
5.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

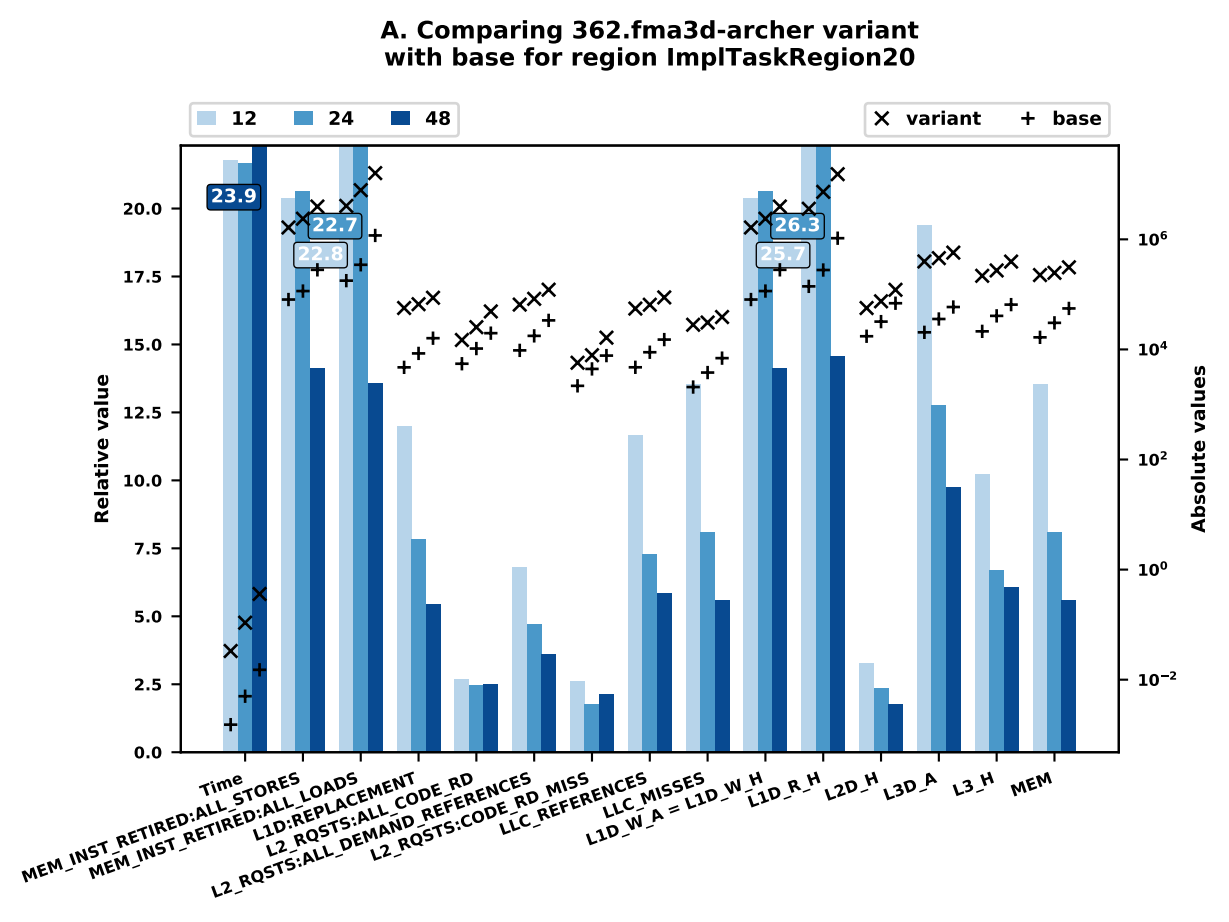

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion20
12
24
48
variant
base
Relative value
Absolute values
24.7
17.8
17.8
18.0
19.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

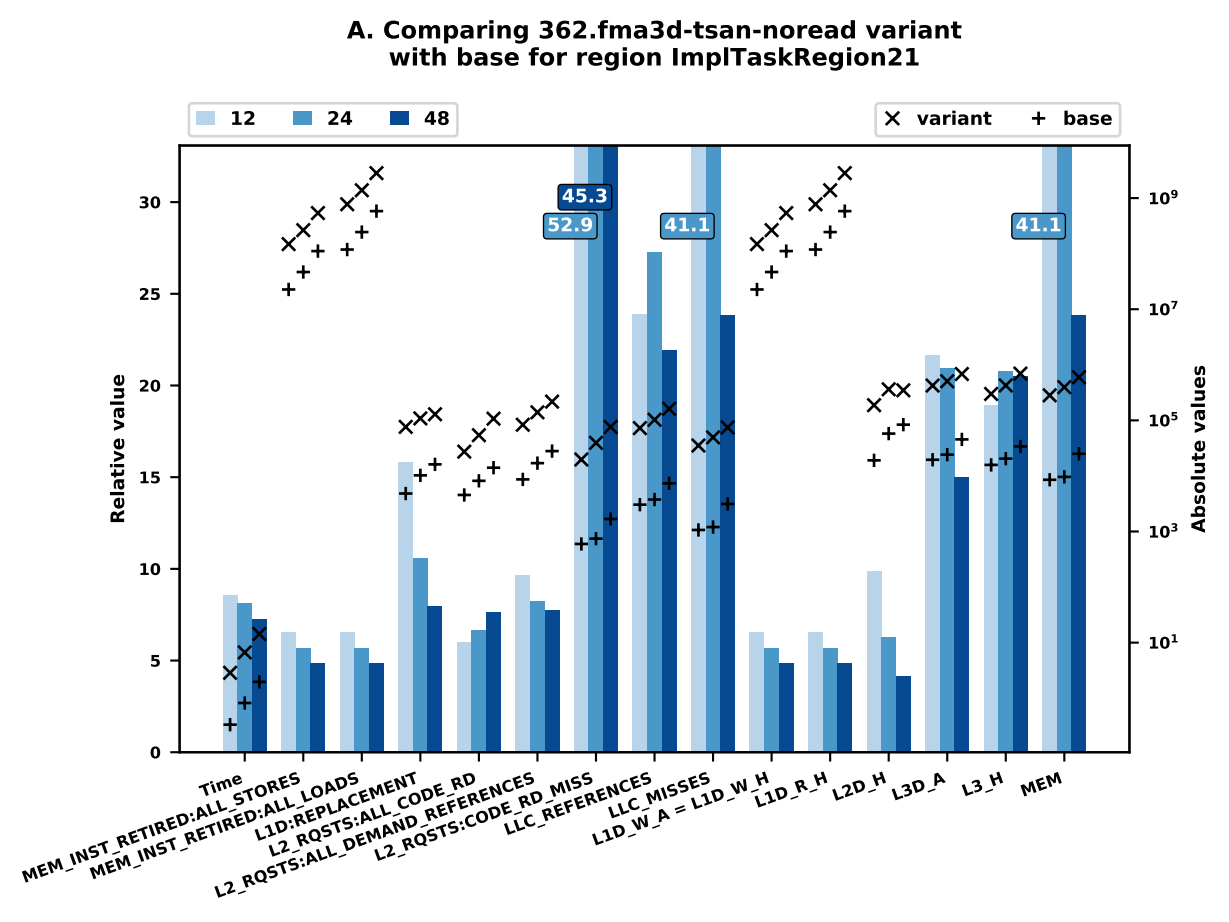

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion20
12
24
48
variant
base
25.7
21.9
24.5
20.8
Relative value
Absolute values
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
10^{-2}
10^{0}
10^{2}
10^{4}
10^{6}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

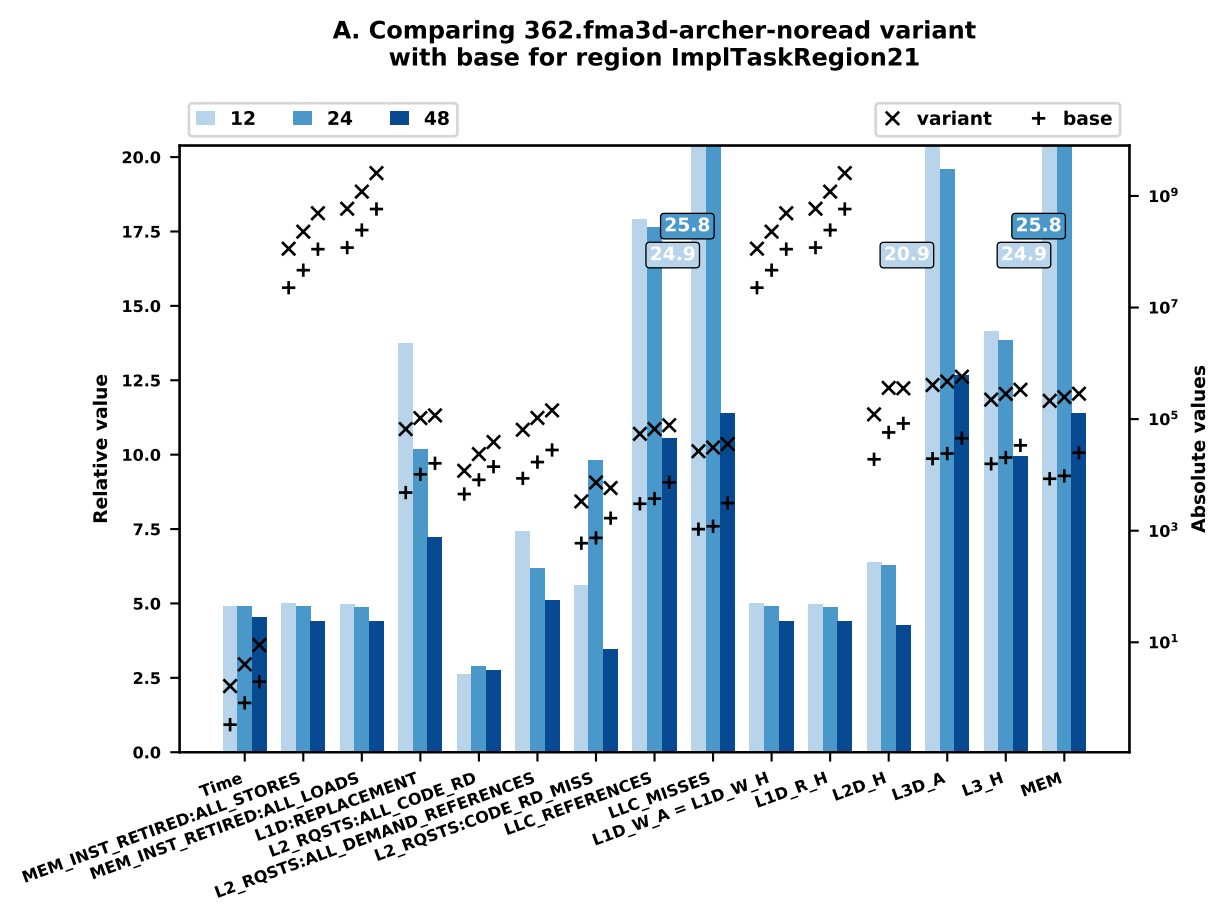

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion20
12
24
48
variant
base
Relative value
Absolute values
26.9
26.8
26.9
30.8
29.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

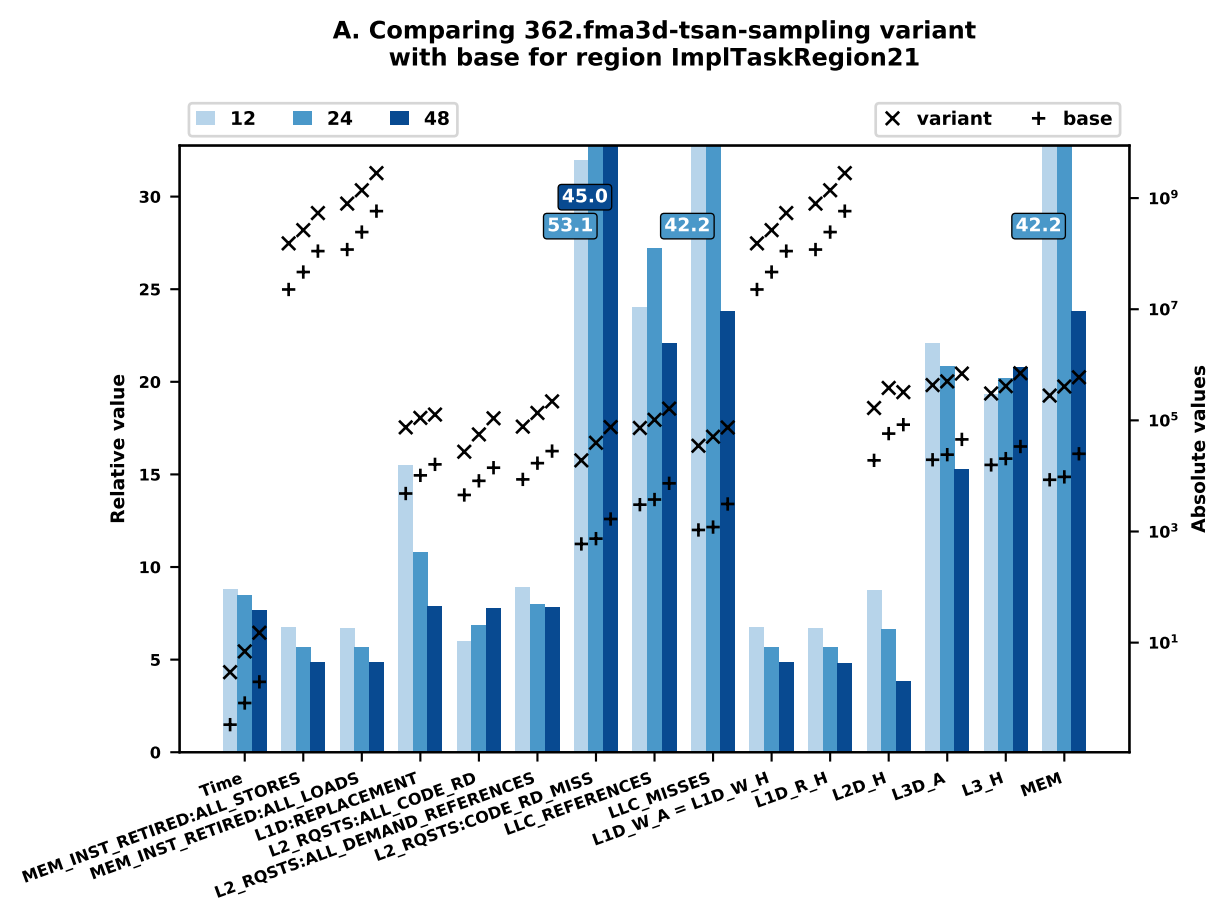

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion20
12
24
48
variant
base
25.2
24.7
25.2
28.9
Relative value
Absolute values
0
5
10
15
20
10^{6}
10^{4}
10^{2}
10^{0}
10^{-2}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

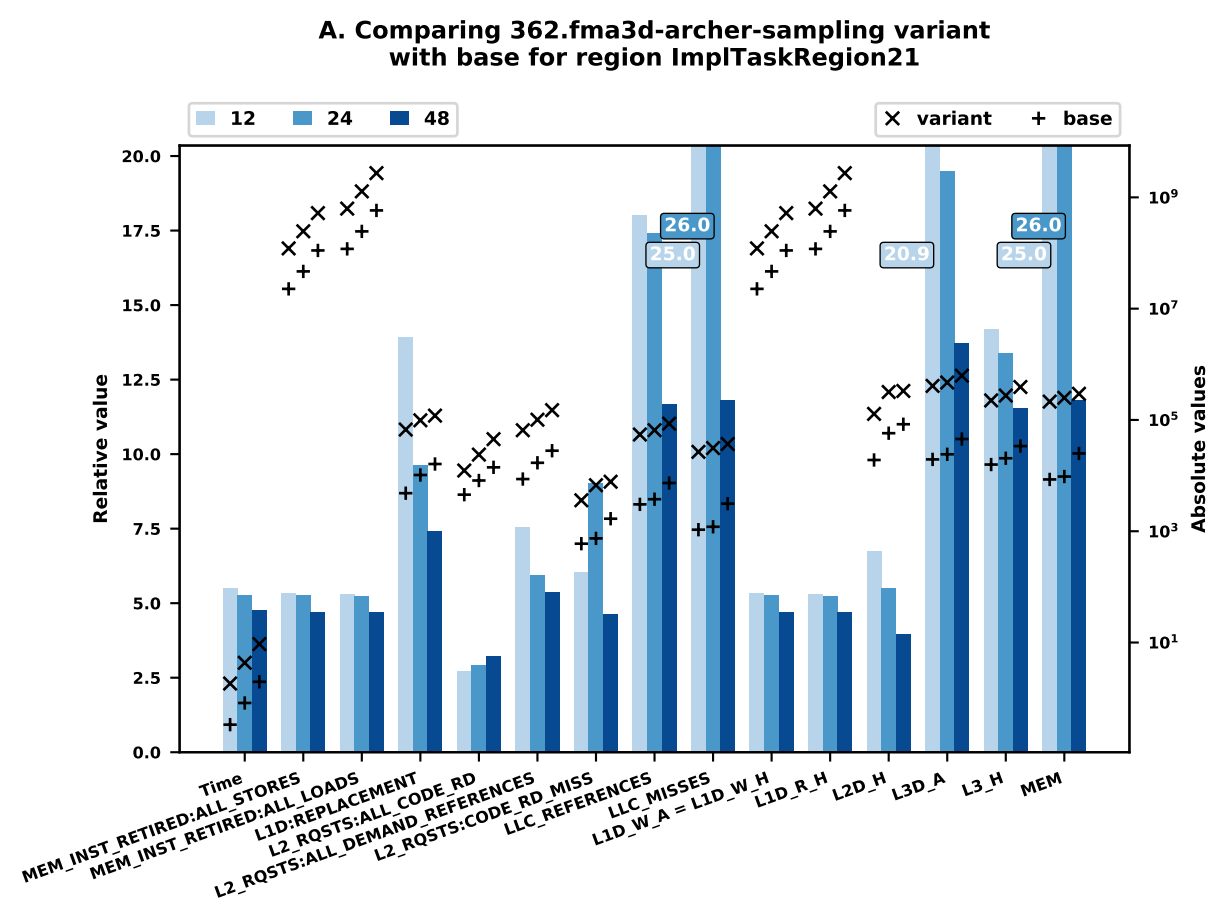

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion20
12
24
48
variant
base
Relative value
Absolute values
24.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

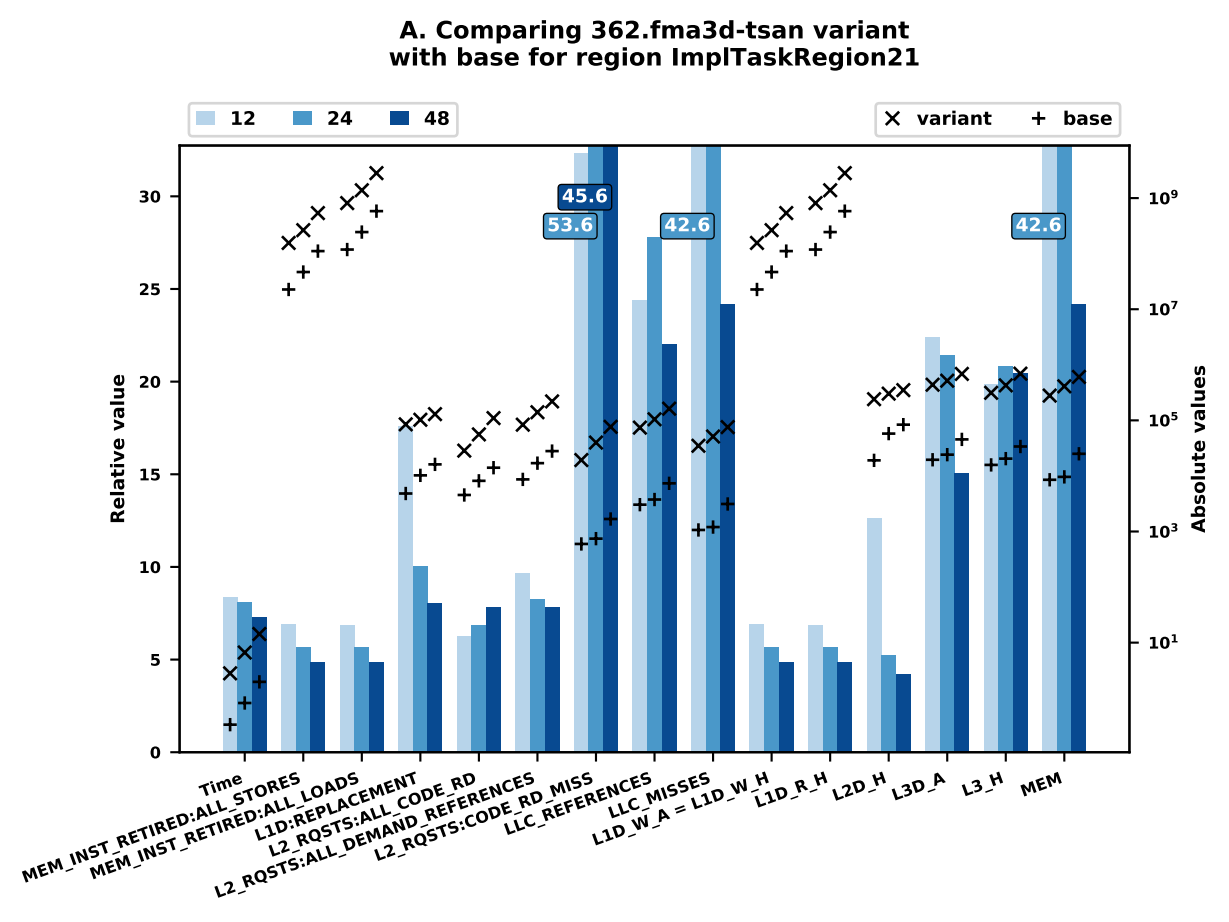

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion20
12
24
48
variant
base
Relative value
Absolute values
23.9
22.7
22.8
26.3
25.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

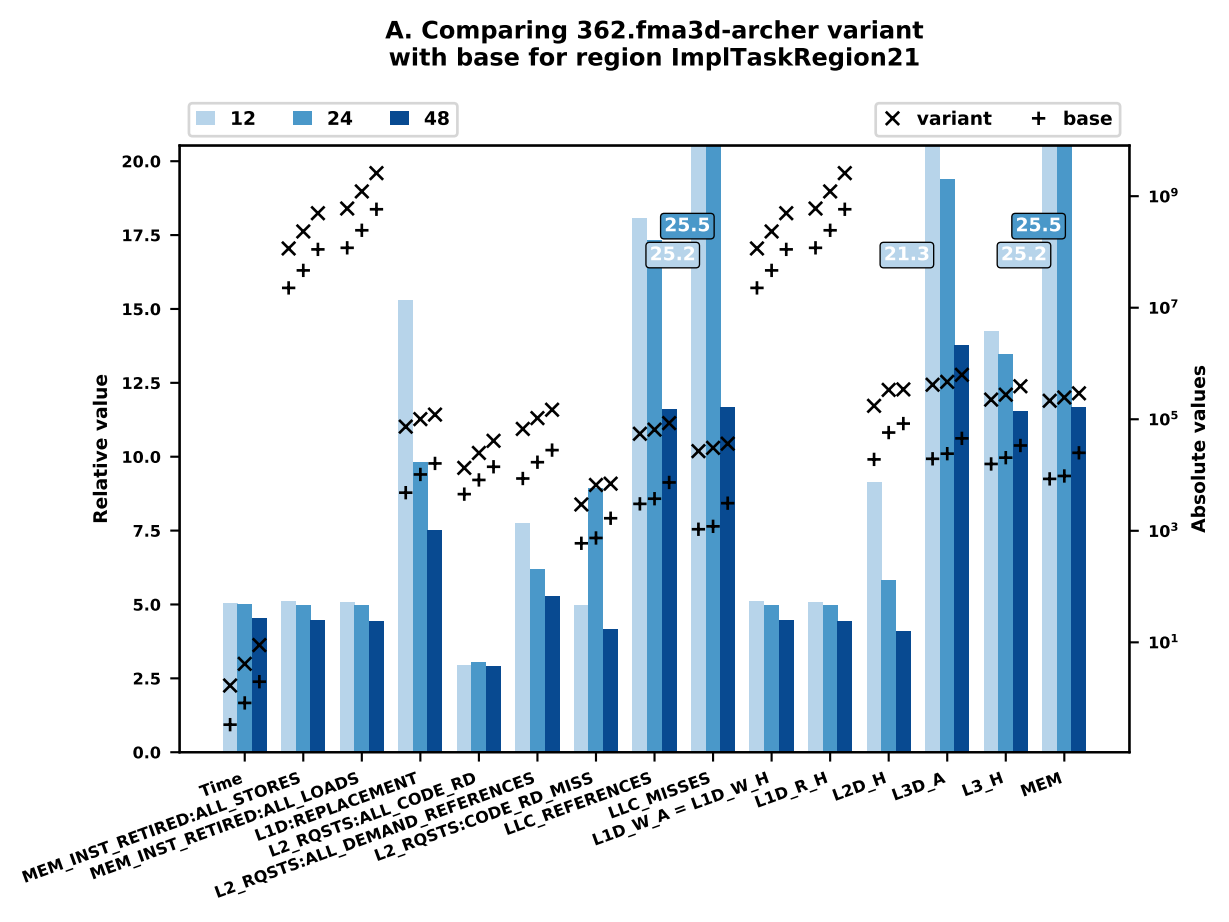

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion21
12
24
48
variant
base
Relative value
Absolute values
45.3
52.9
41.1
41.1
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

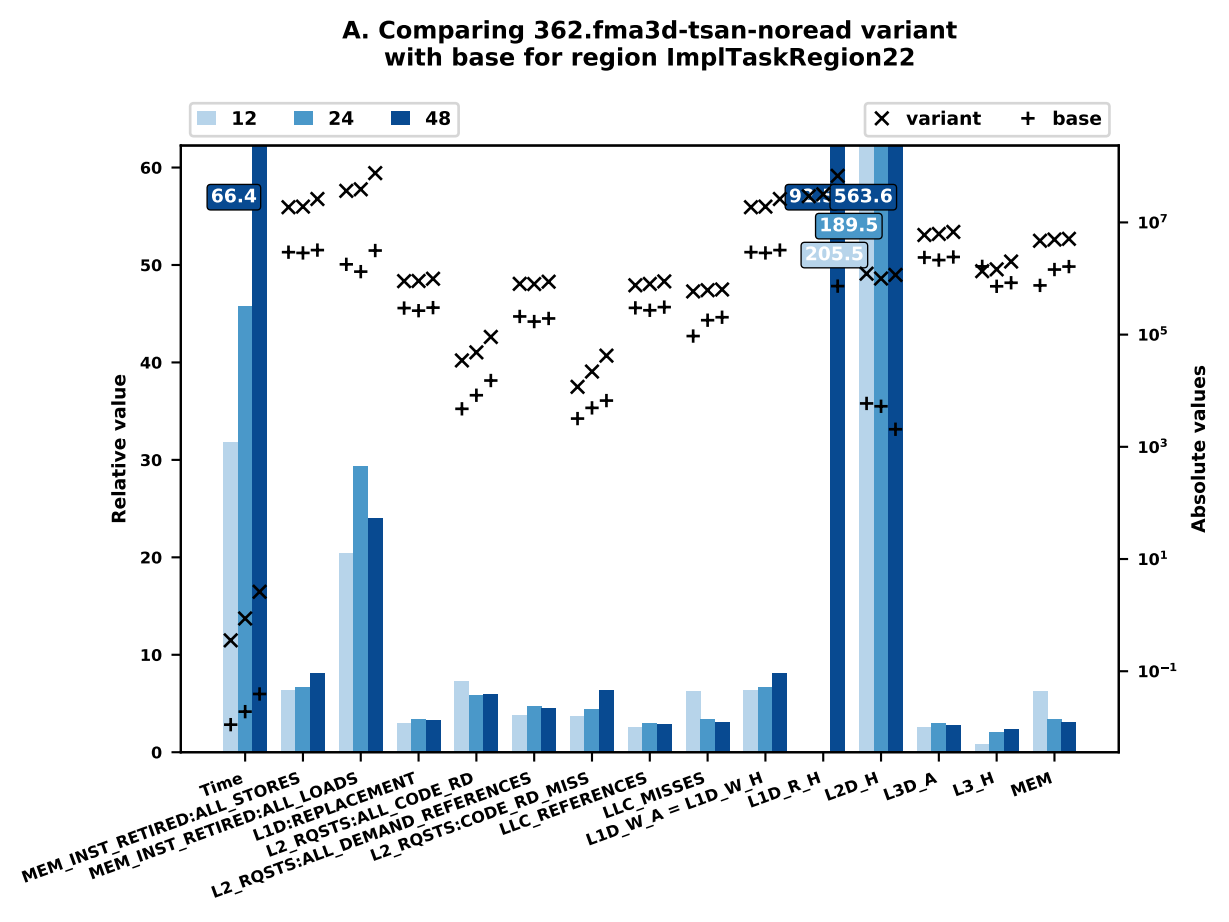

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion21
12
24
48
variant
base
Relative value
Absolute values
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
10^1
10^3
10^5
10^7
10^9
25.8
24.9
20.9
25.8
24.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

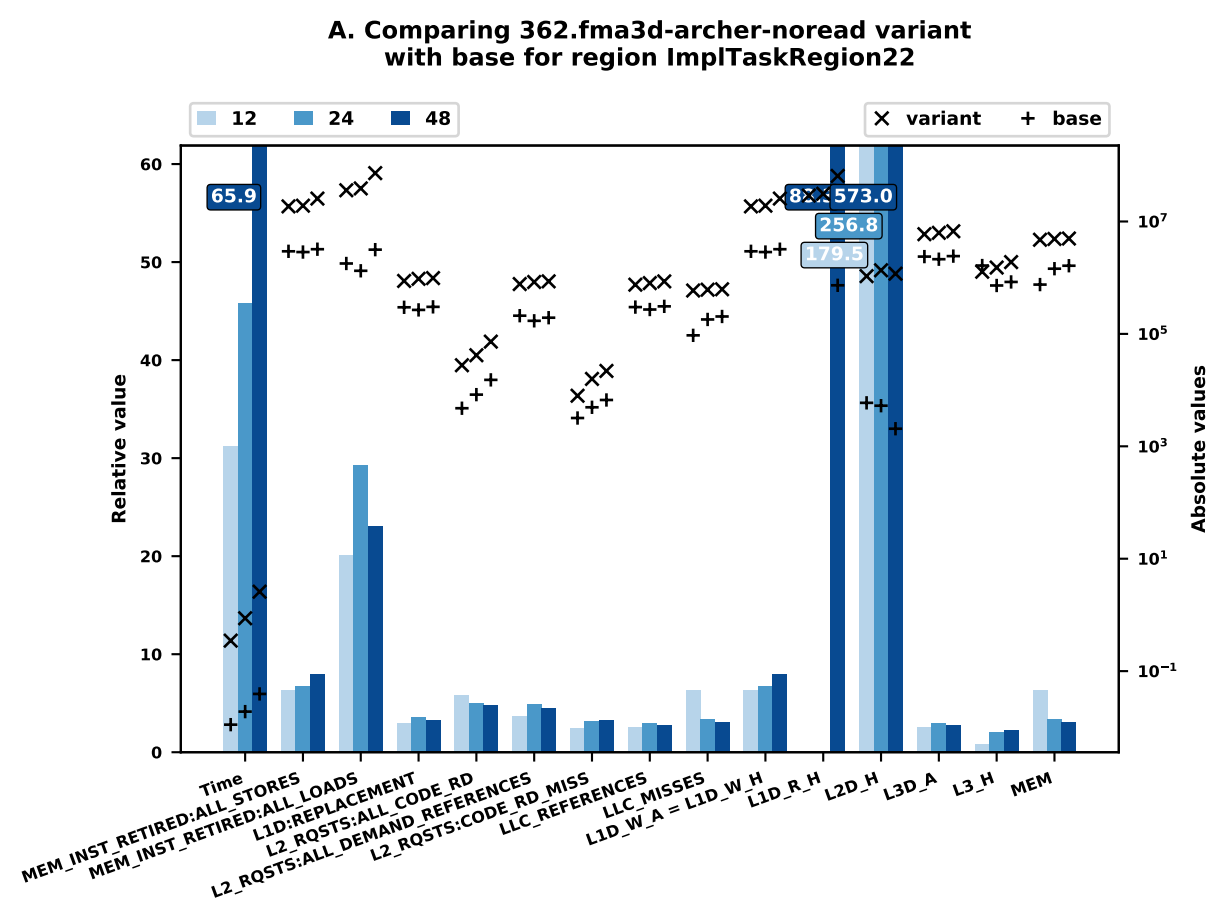

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion21
12
24
48
variant
base
Relative value
Absolute values
0
5
10
15
20
25
30
10^1
10^3
10^5
10^7
10^9
45.0
53.1
42.2
42.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

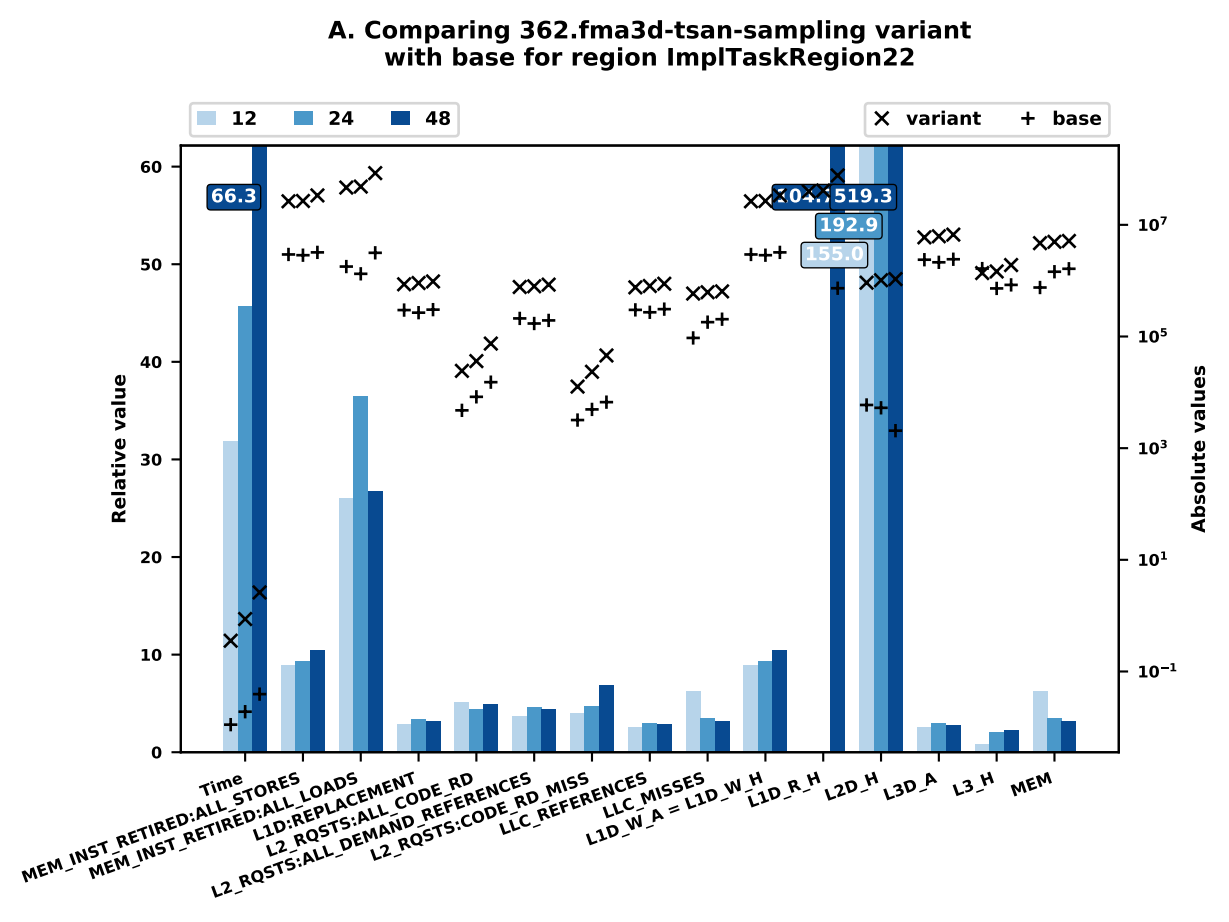

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion21
12
24
48
variant
base
Relative value
Absolute values
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10^9
10^7
10^5
10^3
10^1
26.0
25.0
20.9
26.0
25.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

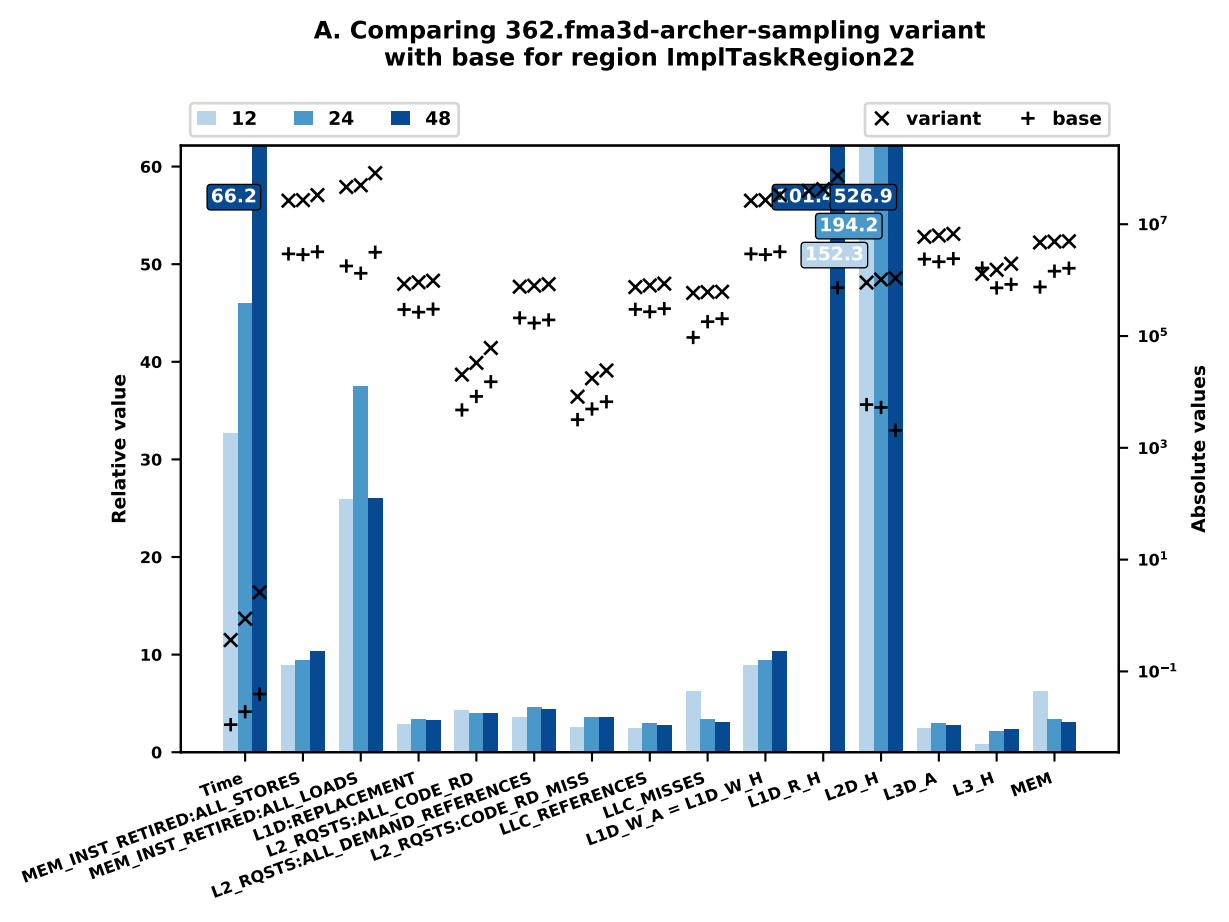

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion21
12
24
48
variant
base
Relative value
Absolute values
45.6
53.6
42.6
42.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

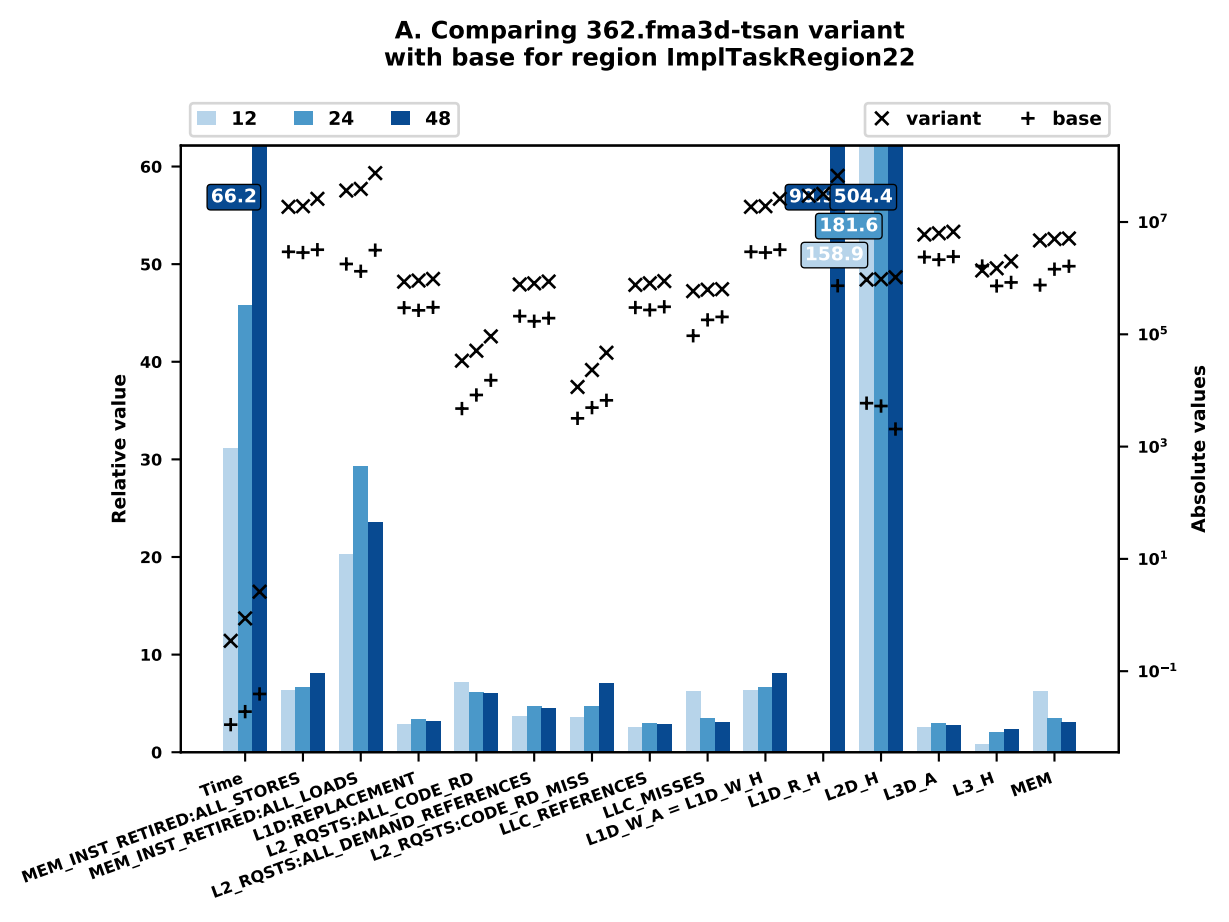

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion21
12
24
48
variant
base
Relative value
Absolute values
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
10^1
10^3
10^5
10^7
10^9
25.5
25.2
21.3
25.5
25.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

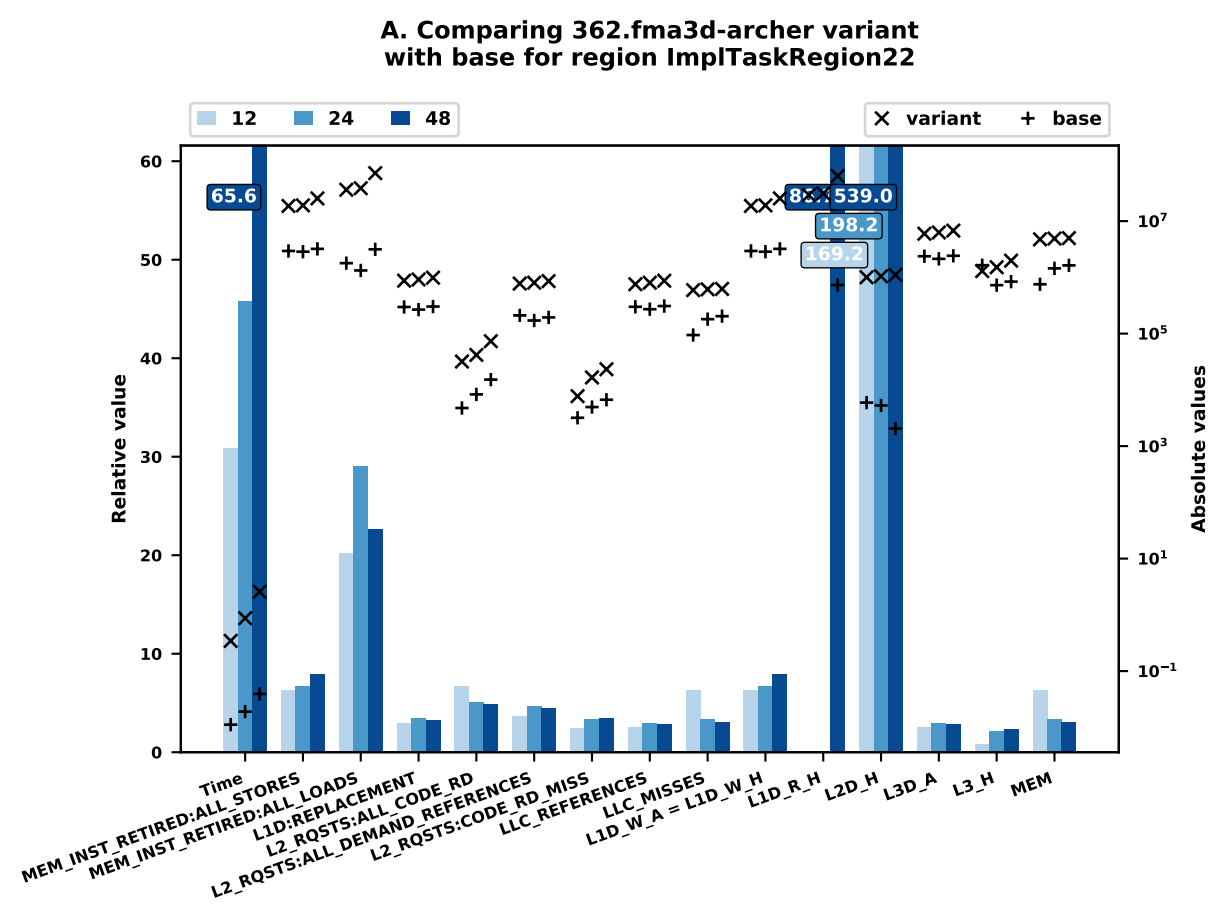

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion22
12
24
48
variant
base
66.4
563.6
189.5
205.5
Relative value
Absolute values
0
10
20
30
40
50
60
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

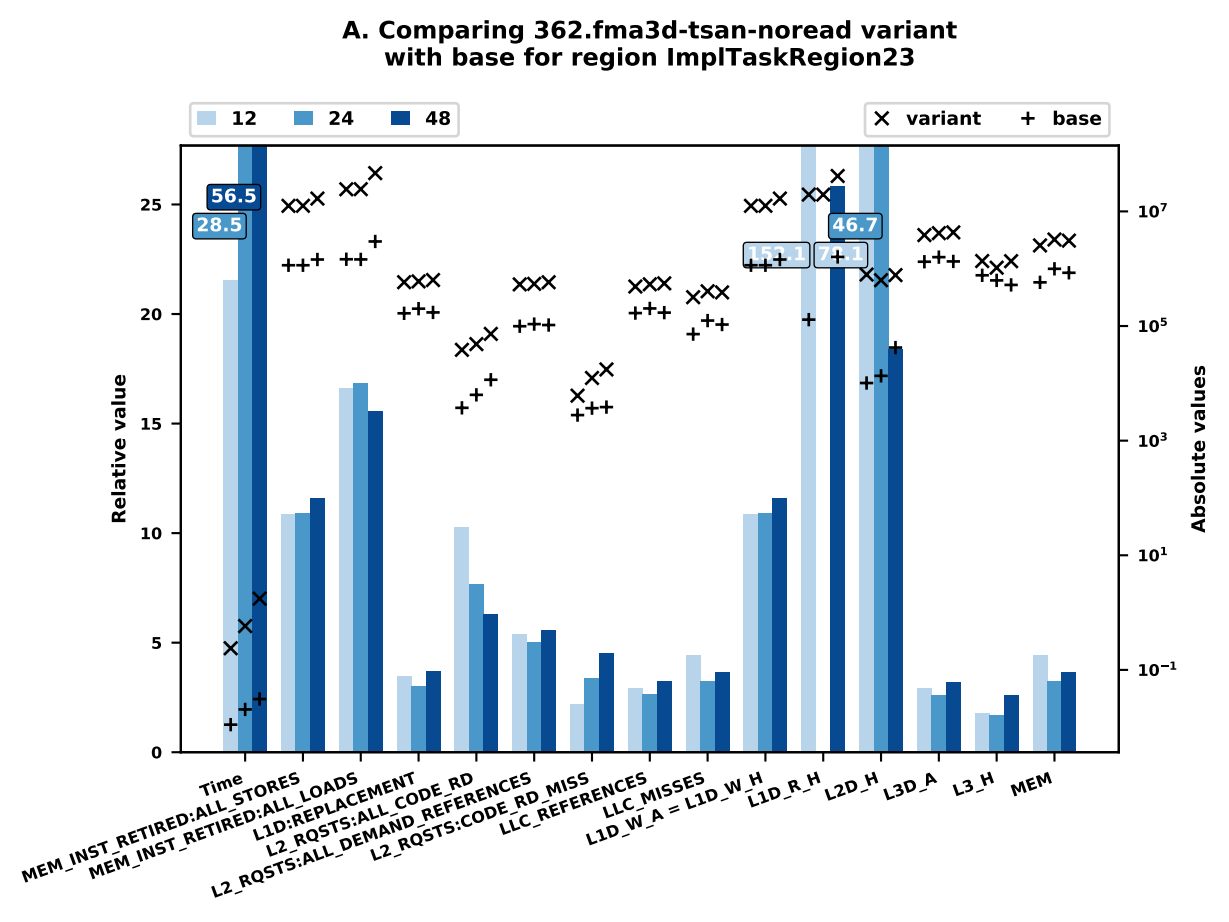

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion22
12
24
48
variant
base
65.9
573.0
256.8
179.5
Relative value
Absolute values
0
10
20
30
40
50
60
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

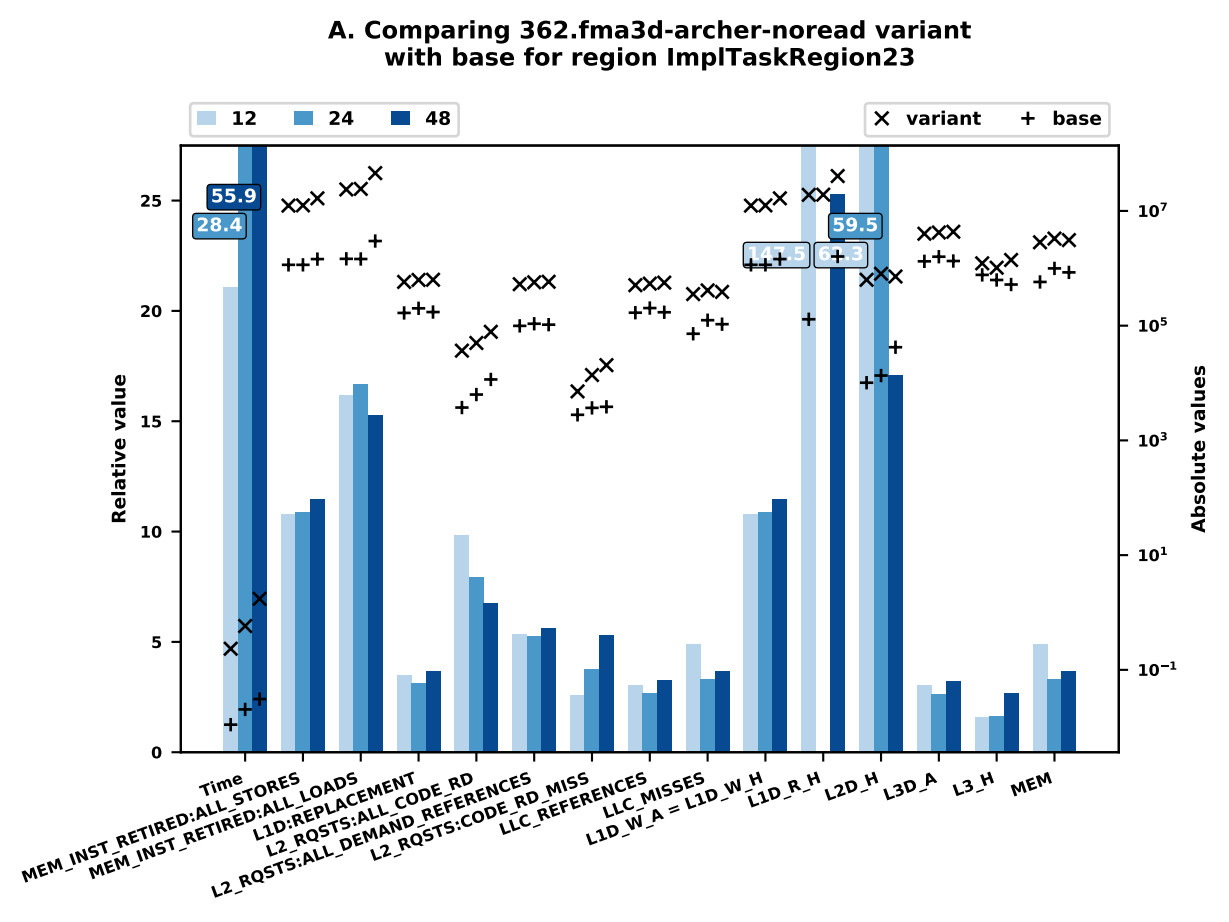

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion22
12
24
48
variant
base
66.3
519.3
192.9
155.0
Relative value
Absolute values
0
10
20
30
40
50
60
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

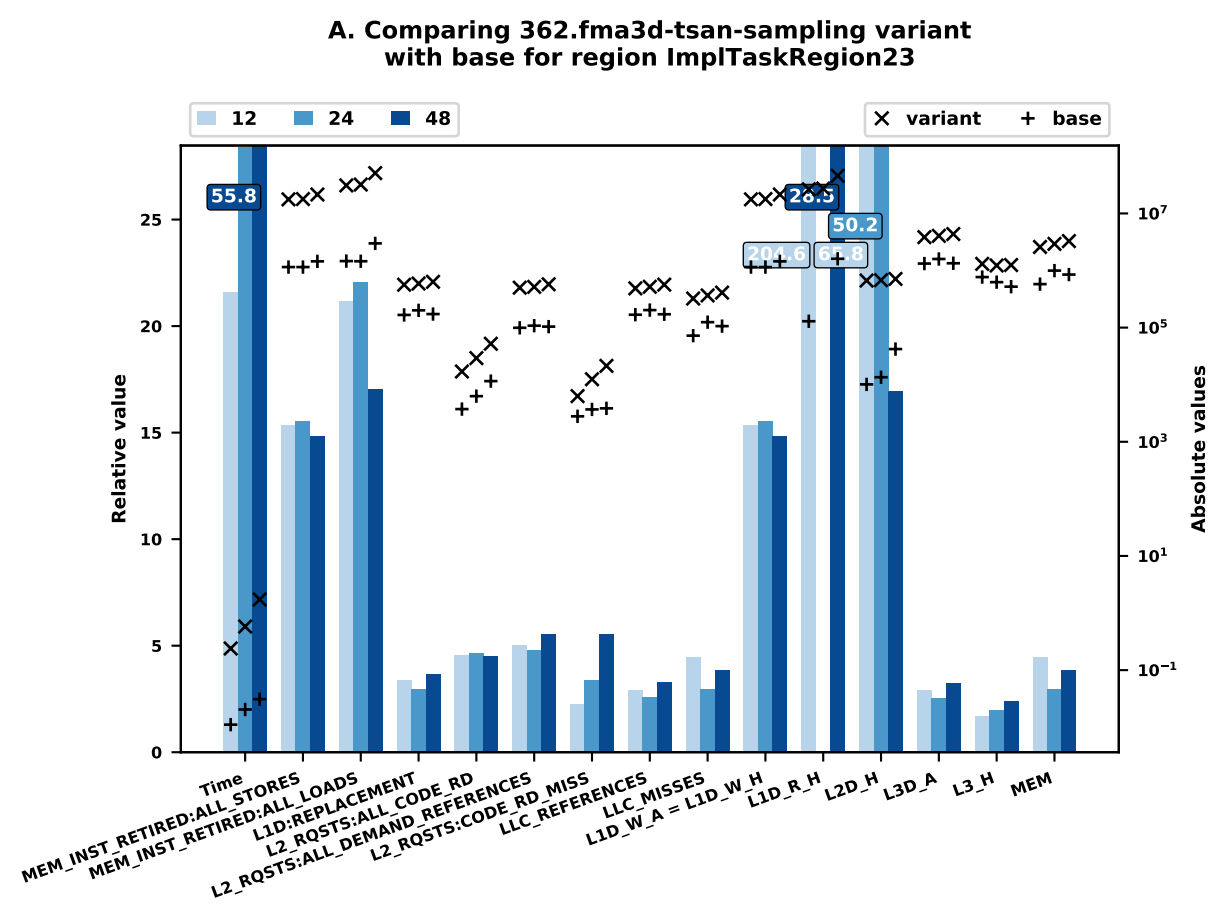

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion22
12
24
48
variant
base
66.2
526.9
194.2
152.3
Relative value
Absolute values
0
10
20
30
40
50
60
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

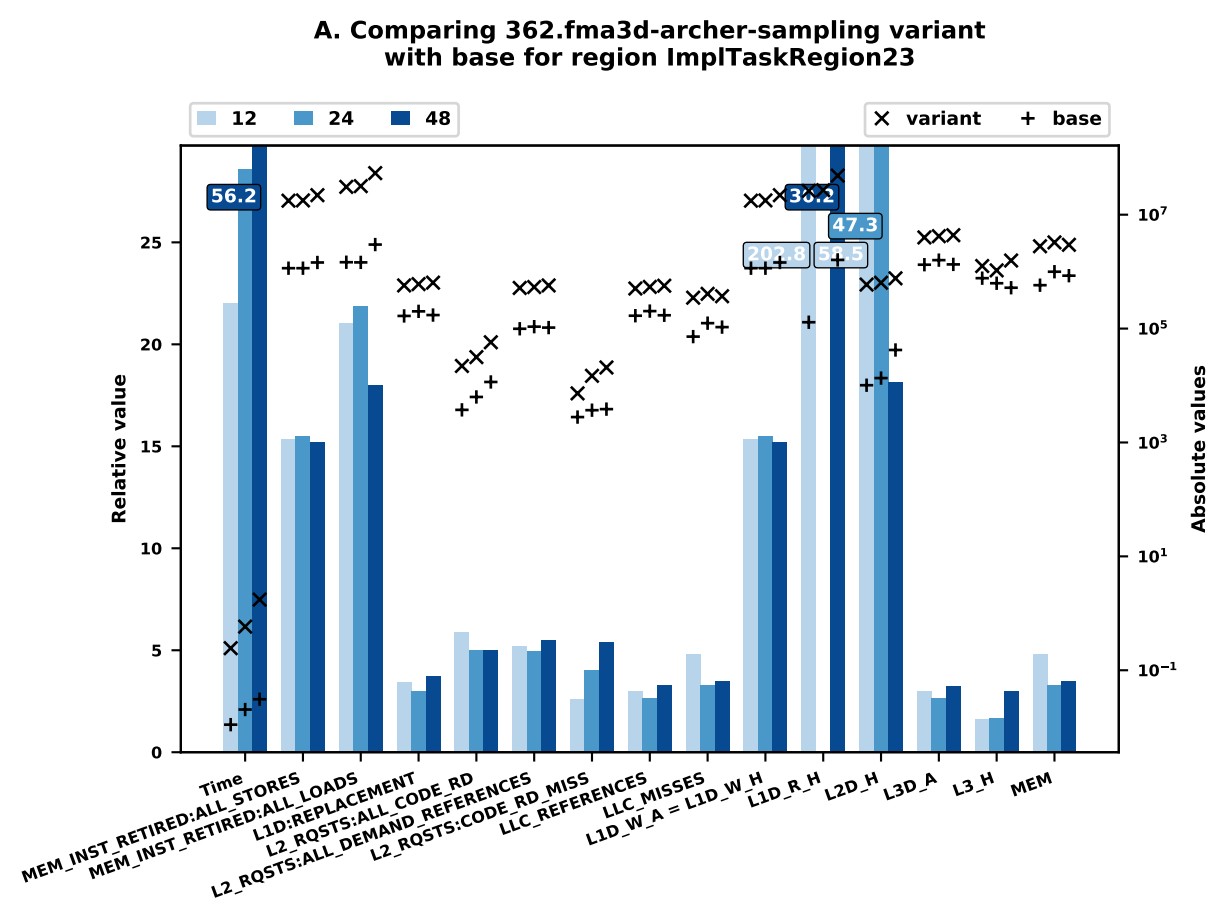

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion22
12
24
48
variant
base
66.2
504.4
181.6
158.9
Relative value
Absolute values
0
10
20
30
40
50
60
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

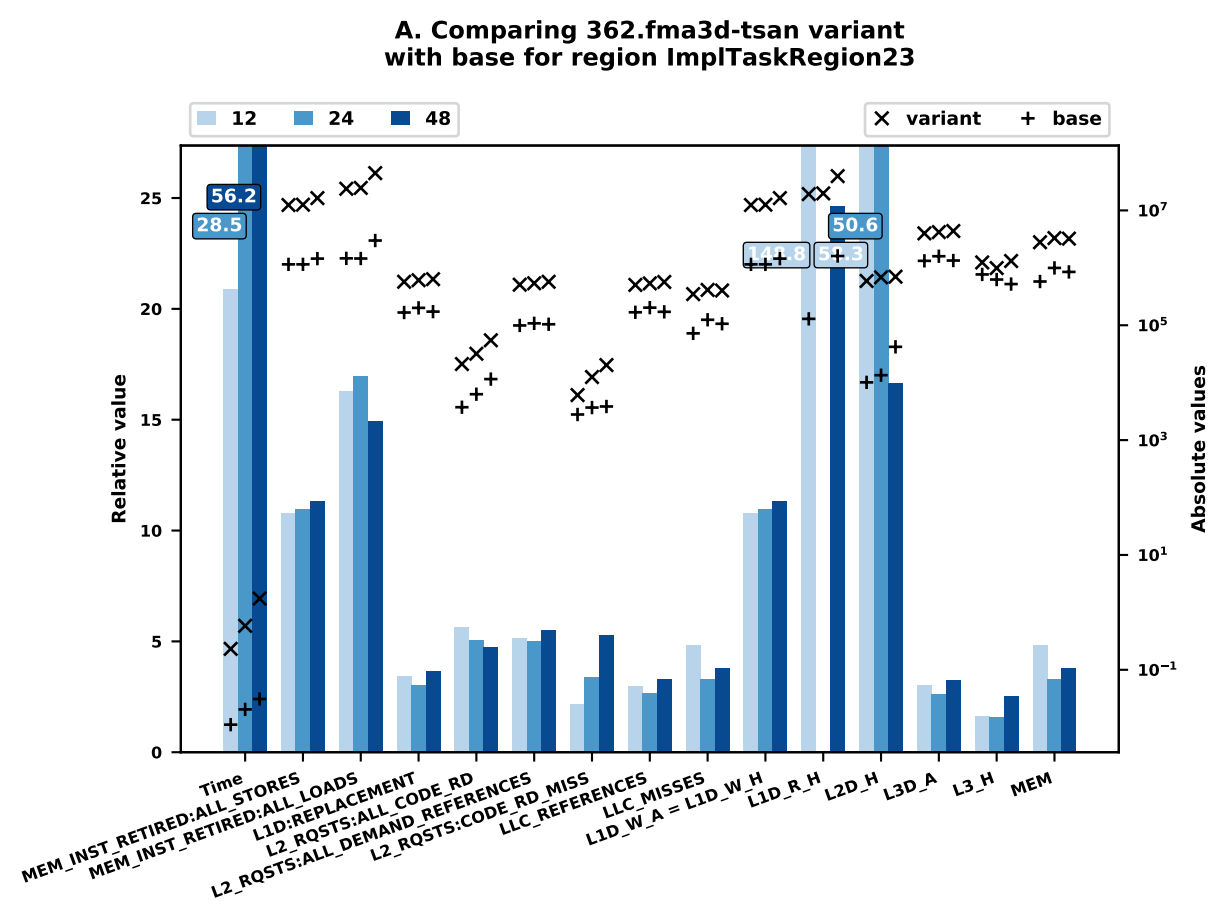

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion22
12
24
48
variant
base
65.6
539.0
198.2
169.2
Relative value
Absolute values
0
10
20
30
40
50
60
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

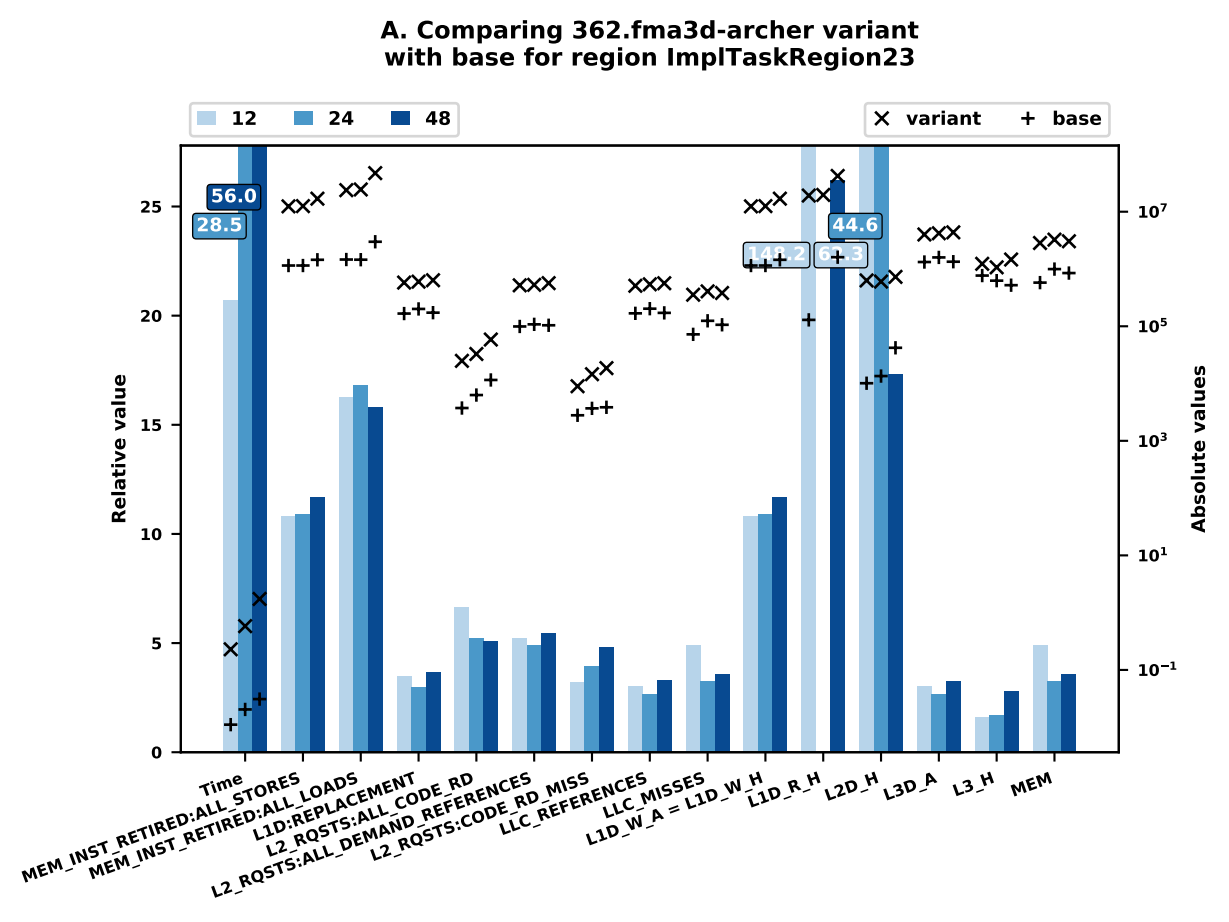

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion23
12
24
48
variant
base
56.5
28.5
46.7
Relative value
Absolute values
0
5
10
15
20
25
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

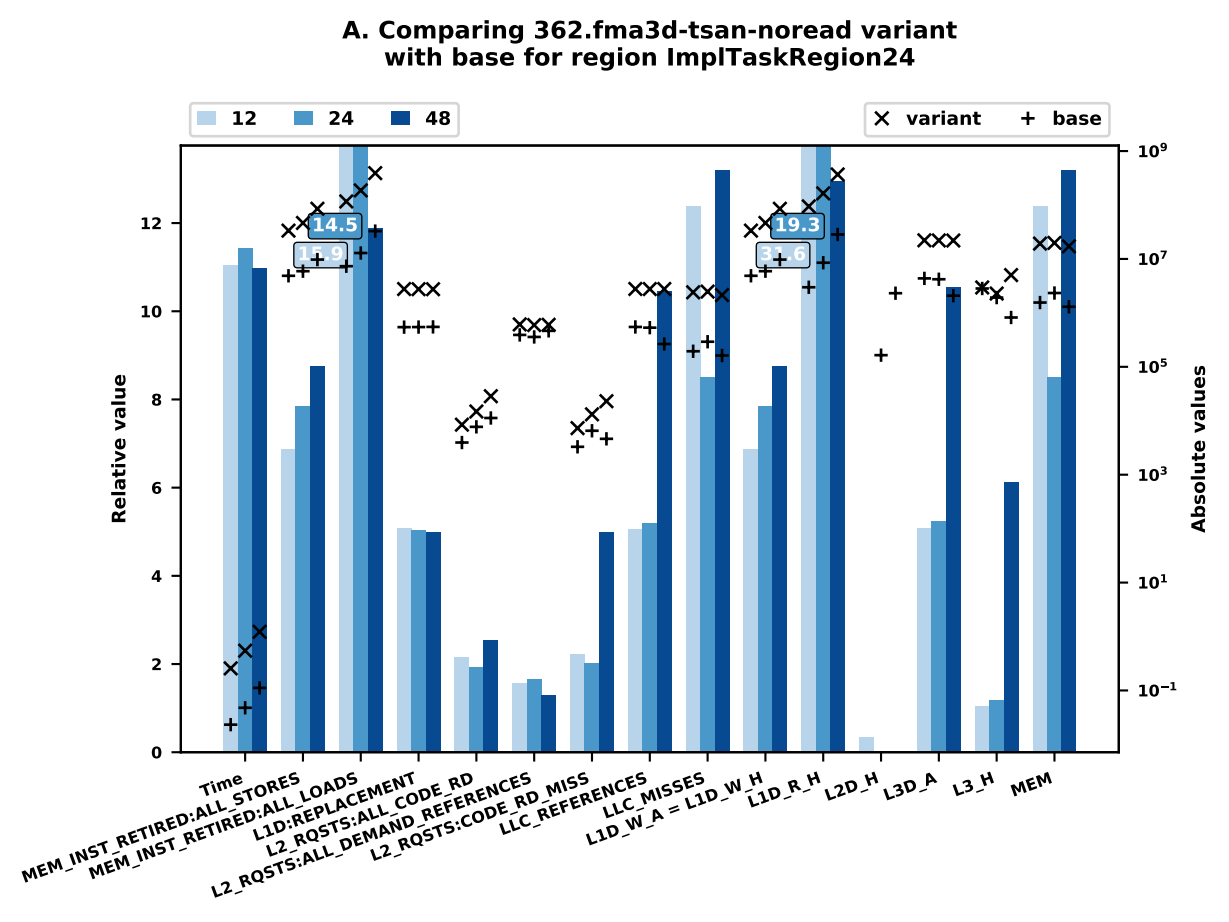

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion23
12
24
48
variant
base
Relative value
Absolute values
55.9
28.4
59.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

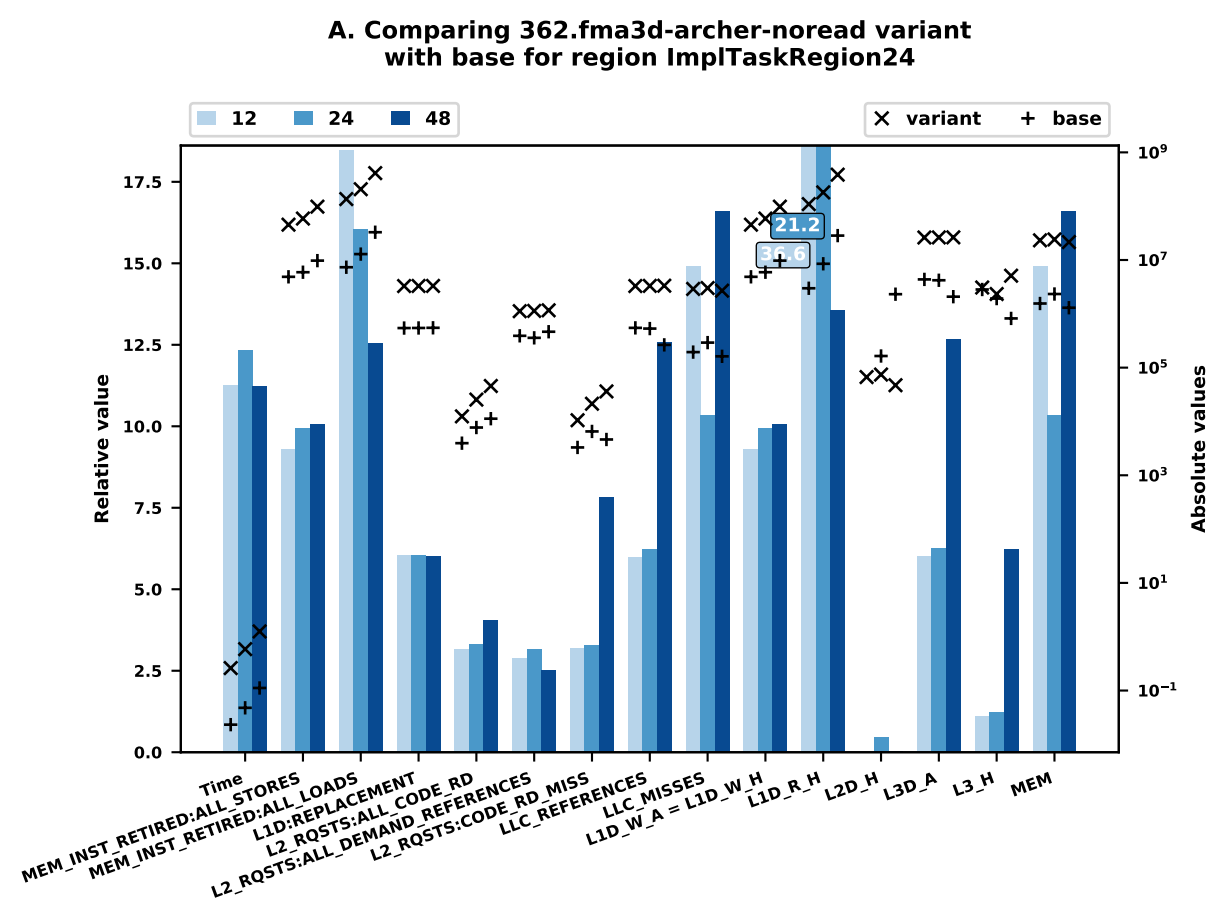

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion23
12
24
48
variant
base
55.8
28.5
50.2
204.6
67.8
Relative value
Absolute values
0
5
10
15
20
25
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

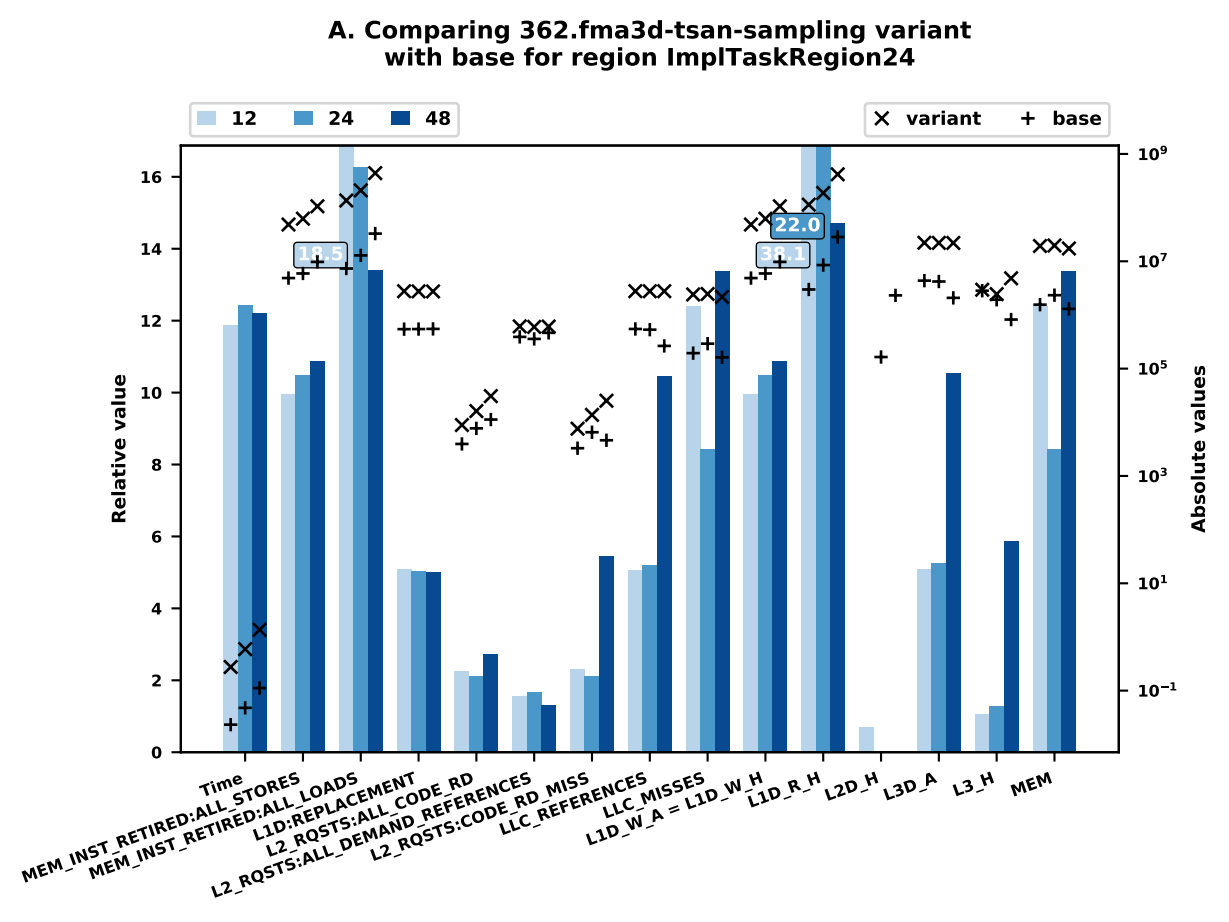

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion23
12
24
48
variant
base
56.2
38.2
47.3
202.8
Relative value
Absolute values
0
5
10
15
20
25
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

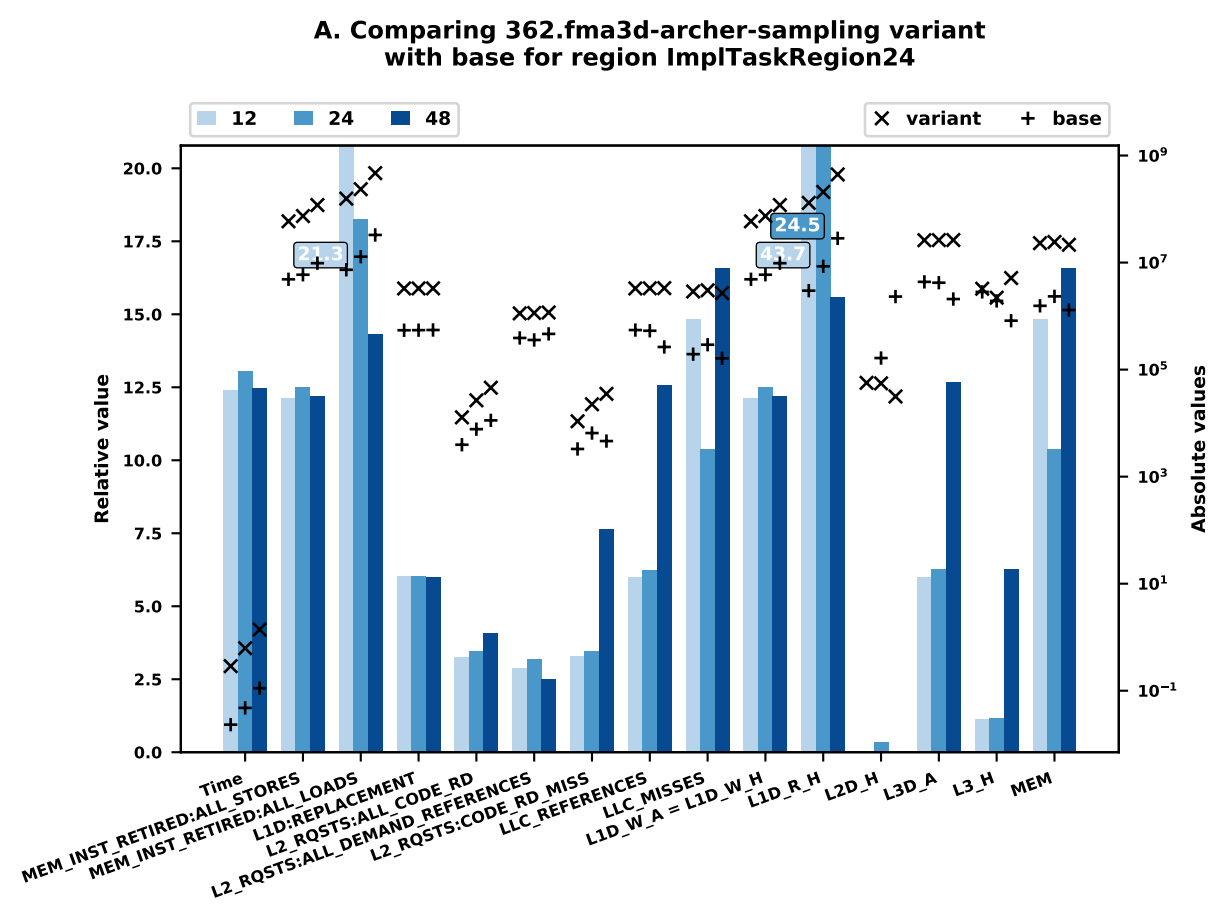

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion23
12
24
48
variant
base
Relative value
Absolute values
56.2
28.5
50.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

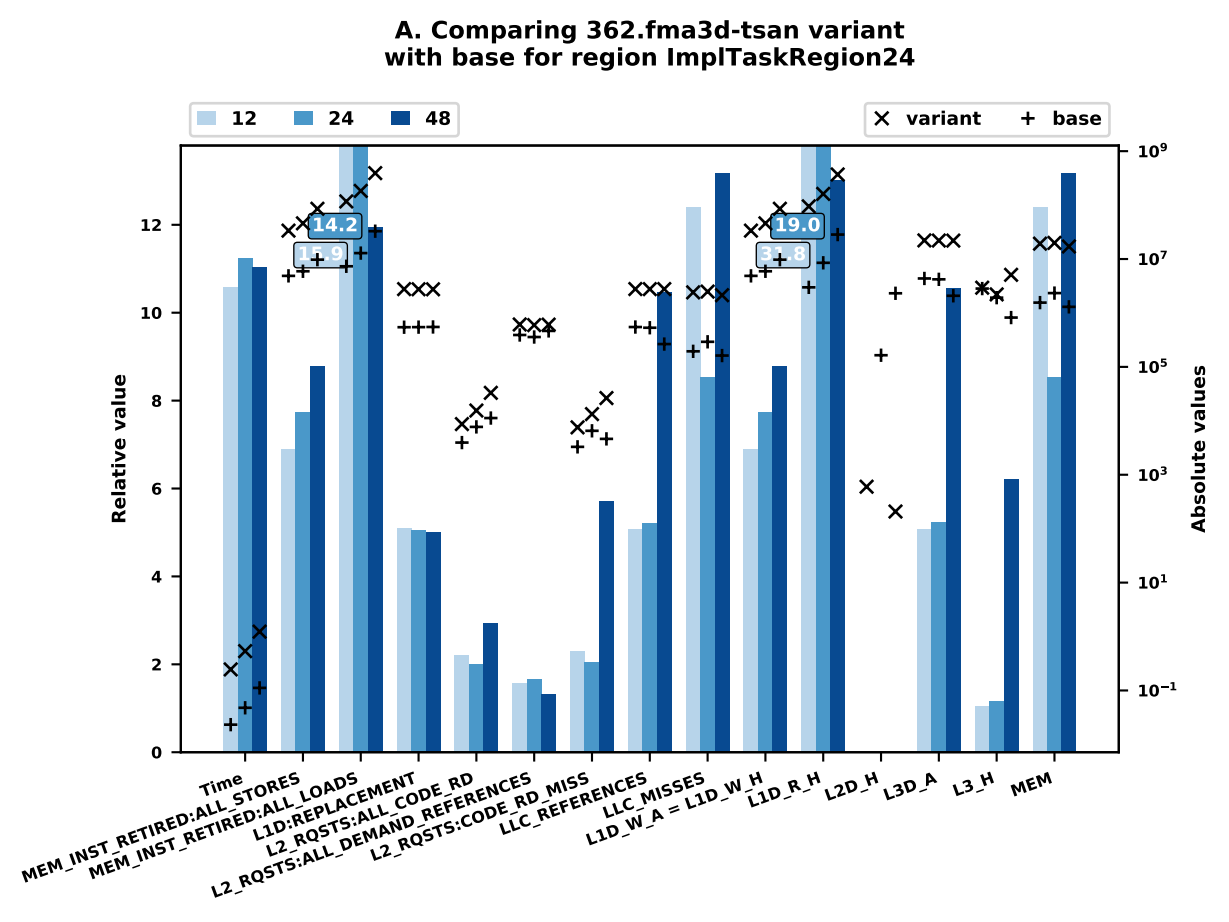

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion23
12
24
48
variant
base
56.0
28.5
44.6
Relative value
Absolute values
0
5
10
15
20
25
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

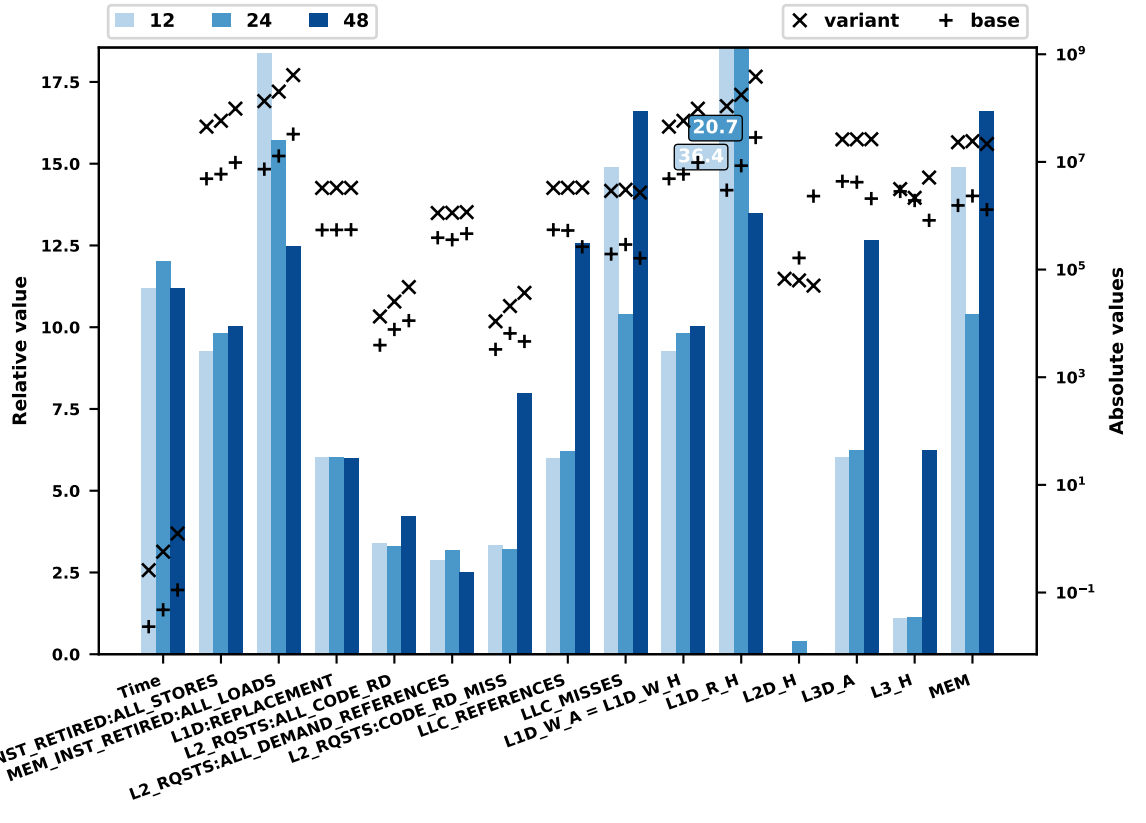

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion24
12
24
48
variant
base
Relative value
Absolute values
14.5
15.3
19.3
33.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

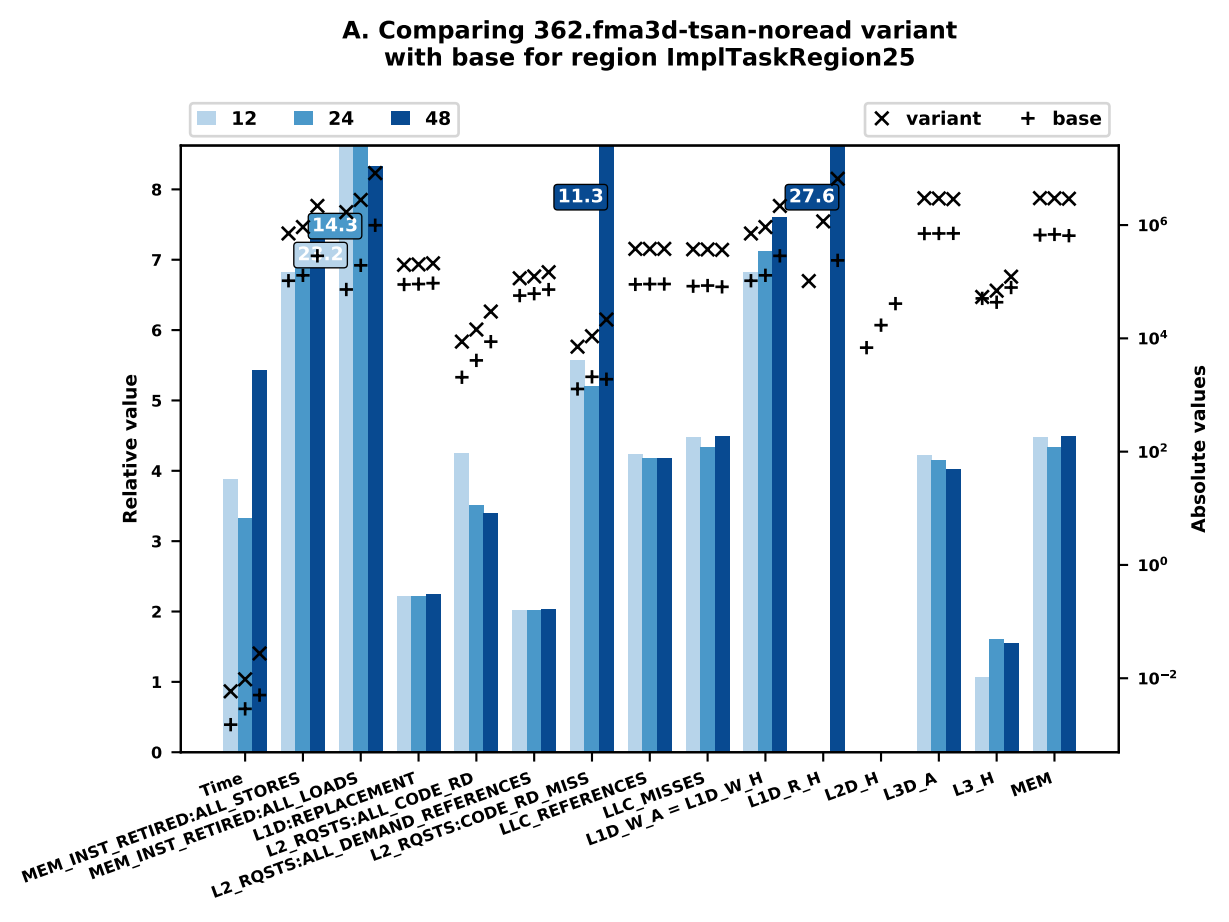

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion24
12
24
48
variant
base
Relative value
Absolute values
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10^{9}
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
21.2
36.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

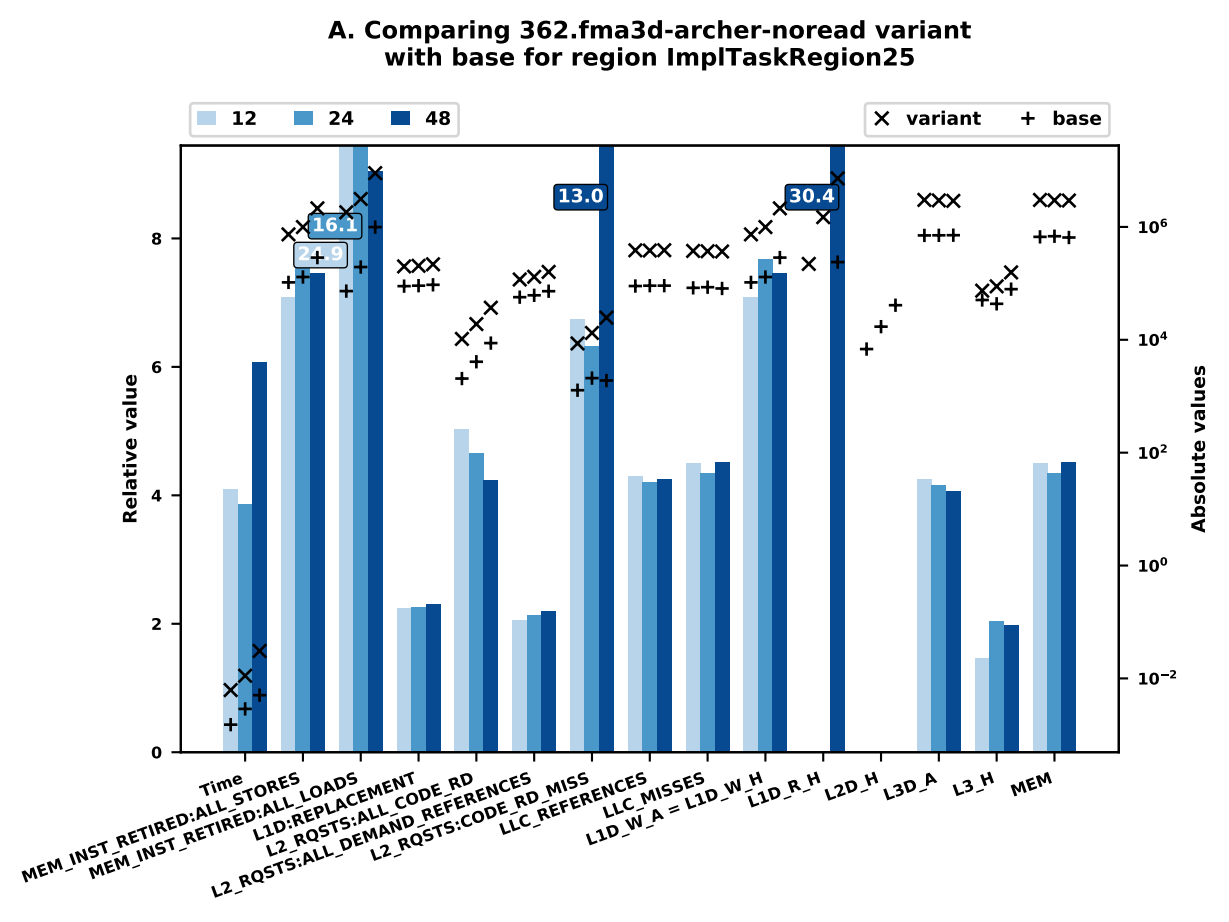

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion24
12
24
48
variant
base
Relative value
Absolute values
18.5
22.0
38.1
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

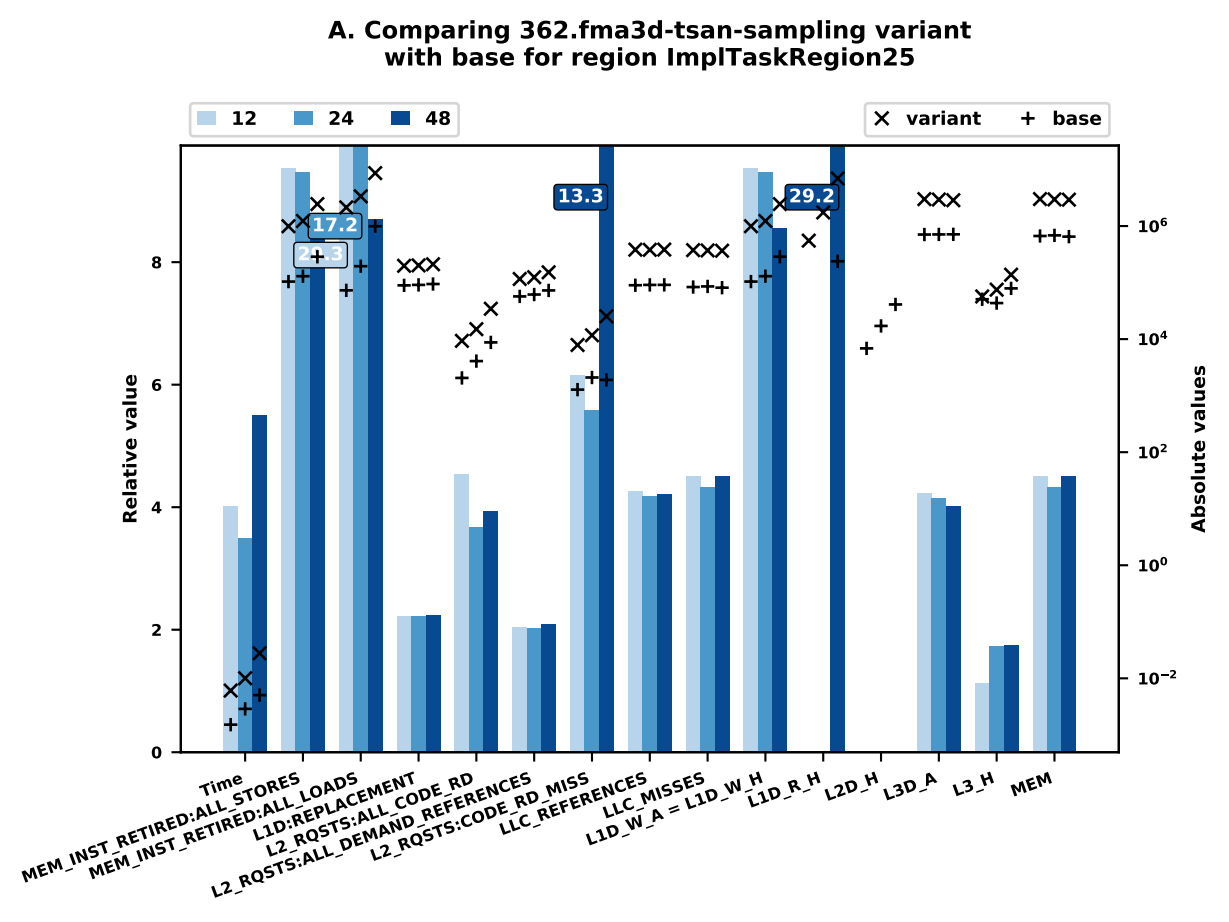

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion24
12
24
48
variant
base
Relative value
Absolute values
20.0
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10^{9}
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
21.3
24.5
43.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

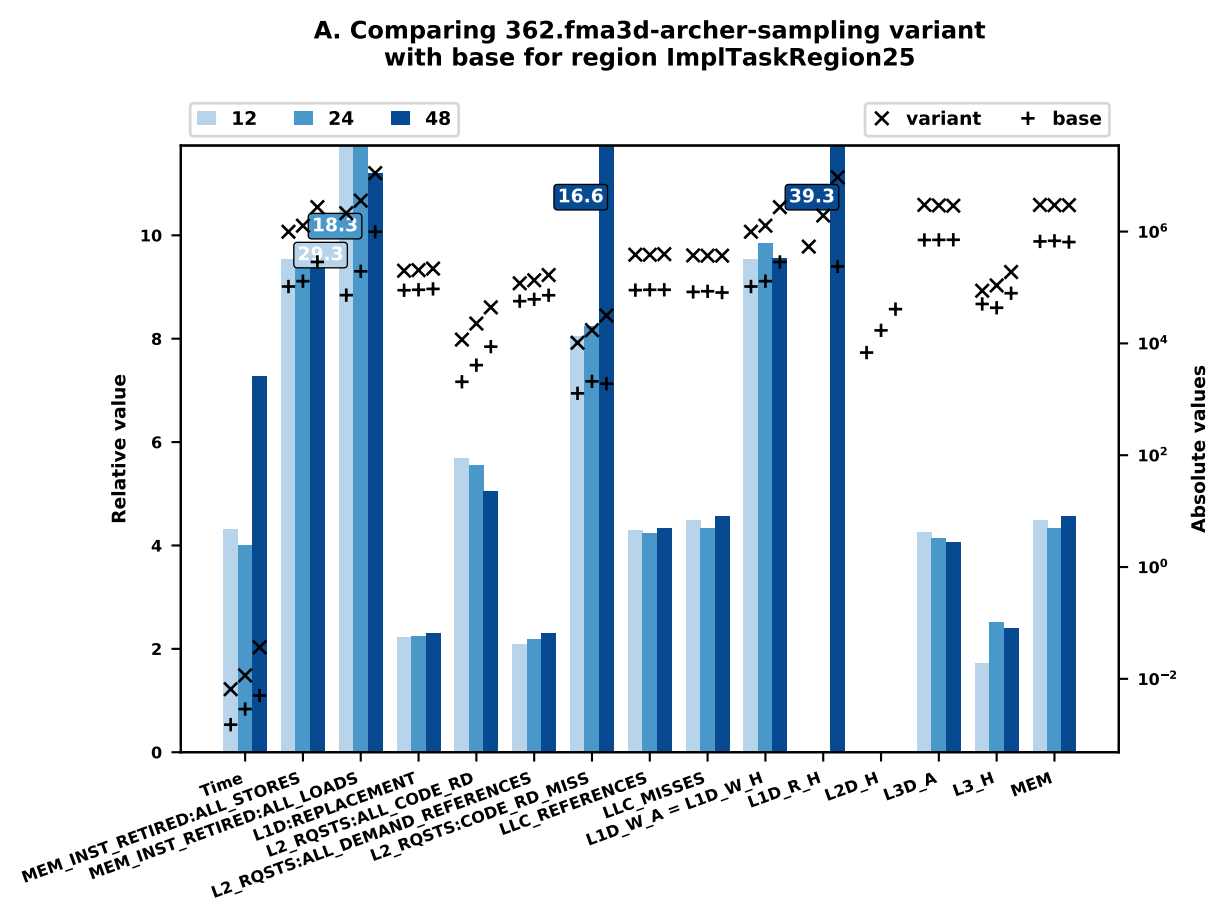

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion24
12
24
48
variant
base
Relative value
Absolute values
14.2
15.3
19.0
33.8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

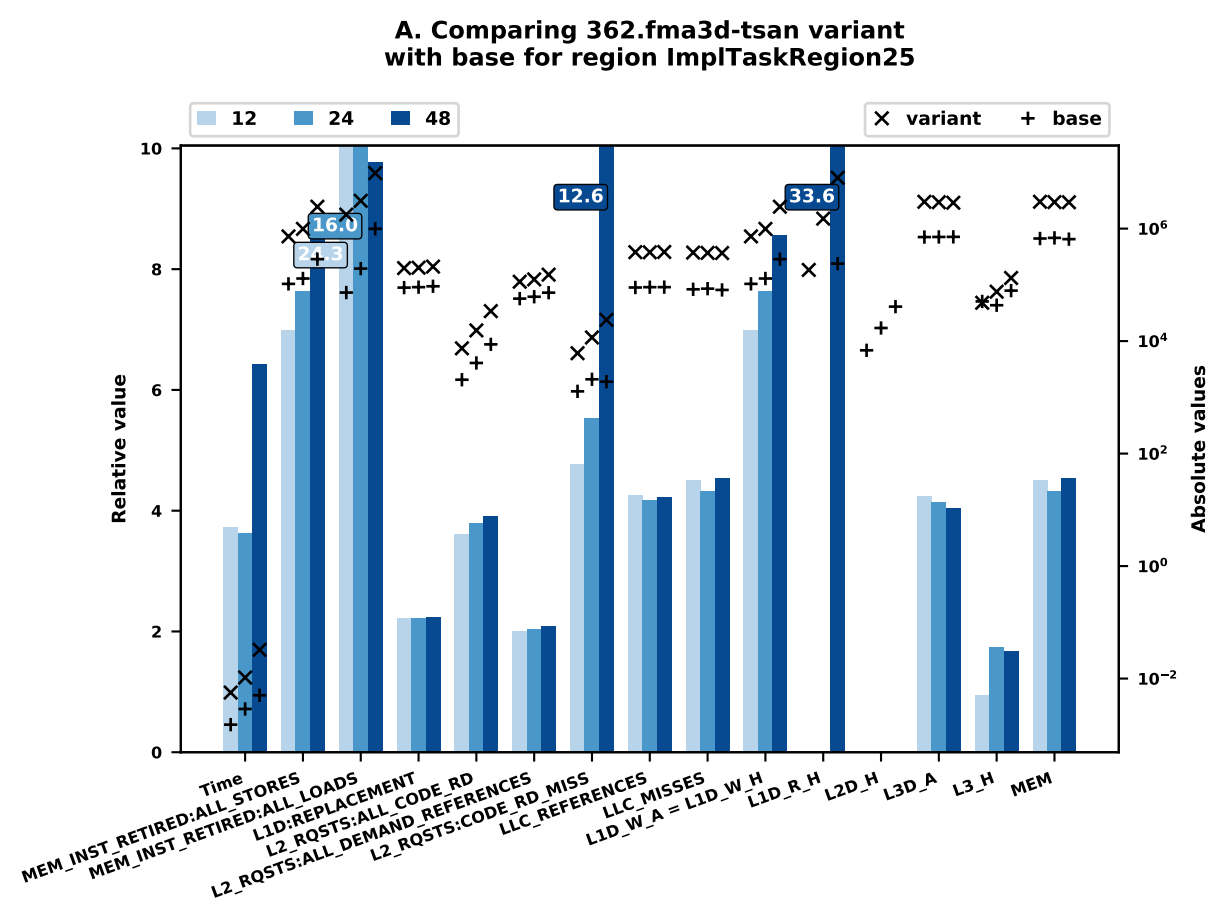

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion24
12
24
48
variant
base
Relative value
Absolute values
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
10^{9}
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
20.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

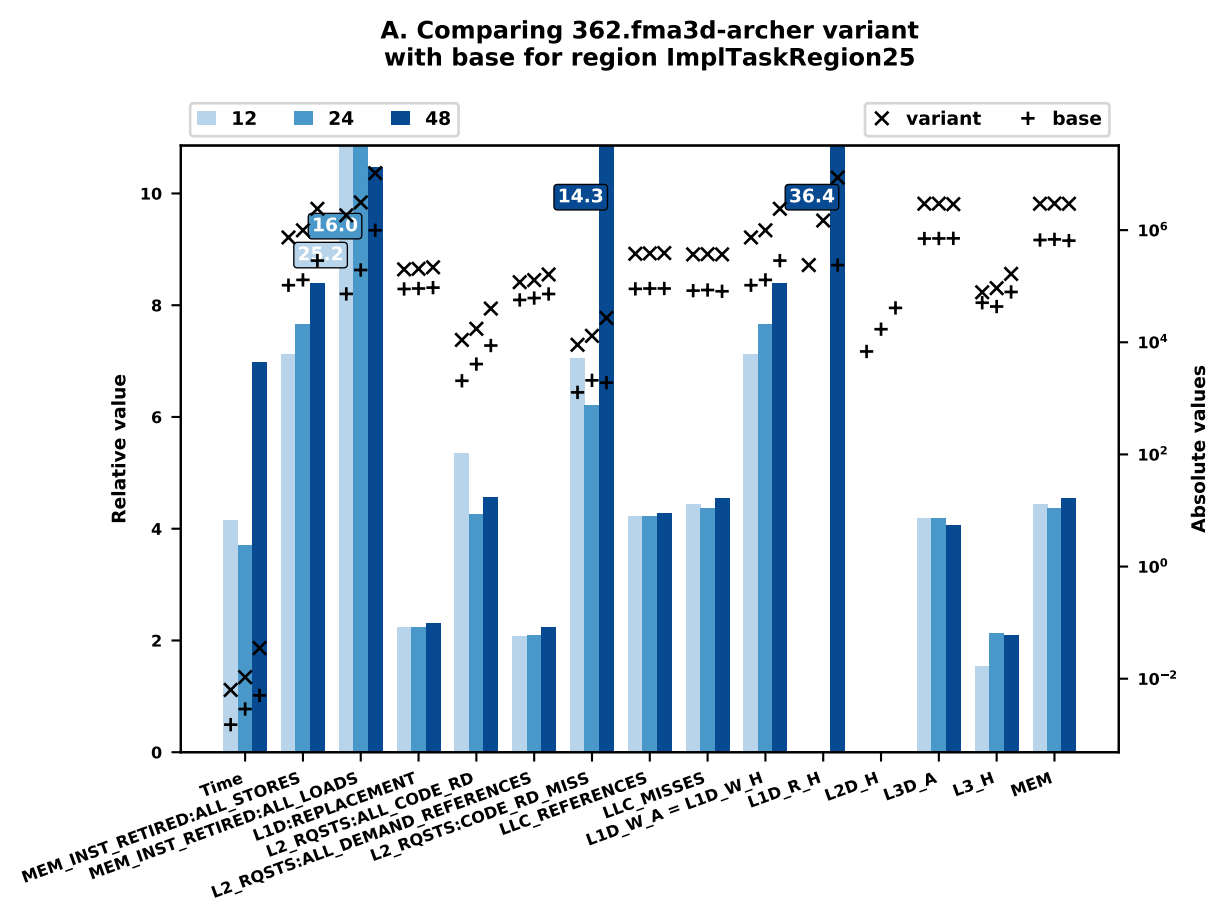

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion25
12
24
48
variant
base
Relative value
Absolute values
14.3
11.3
27.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

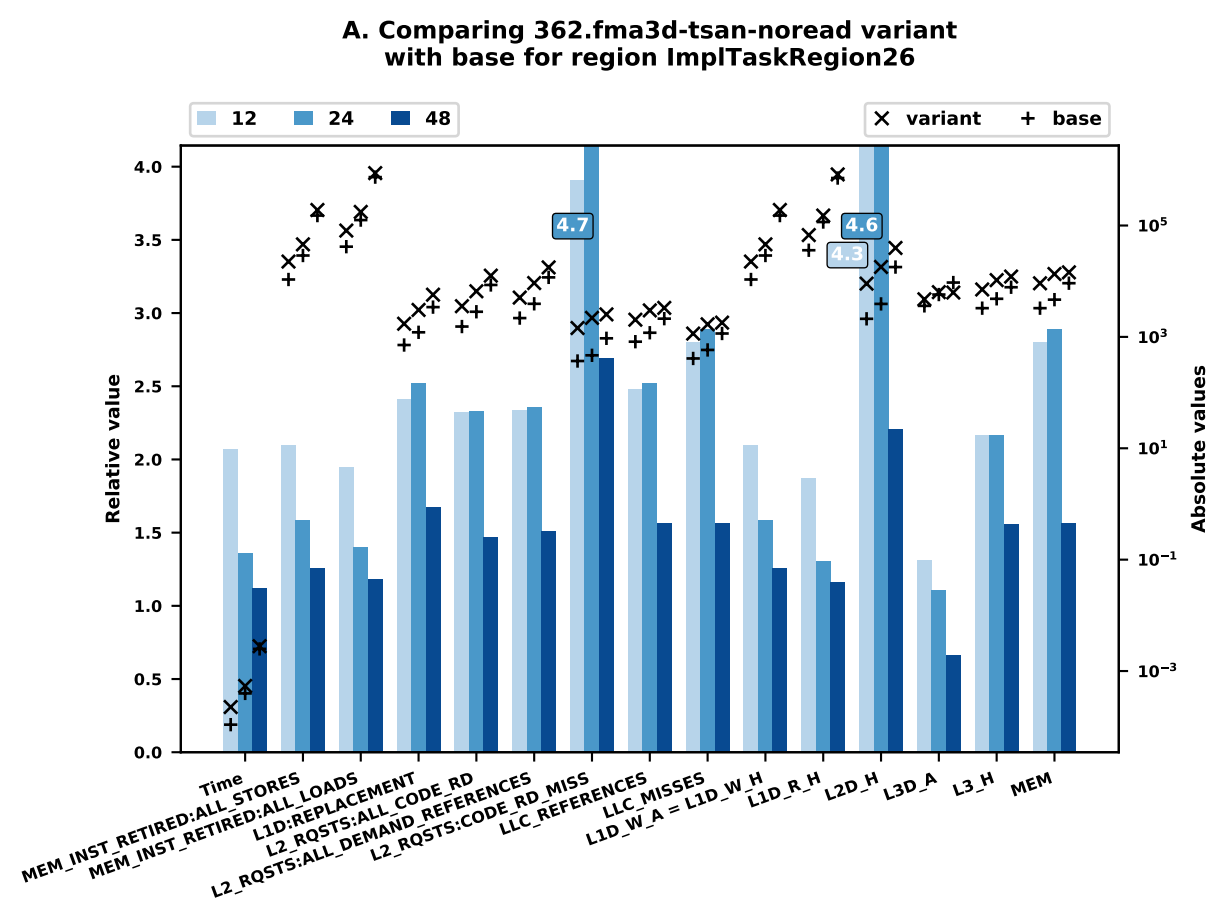

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion25
12
24
48
variant
base
Relative value
Absolute values
0
2
4
6
8
10^{-2}
10^{0}
10^{2}
10^{4}
10^{6}
16.1
24.9
13.0
30.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

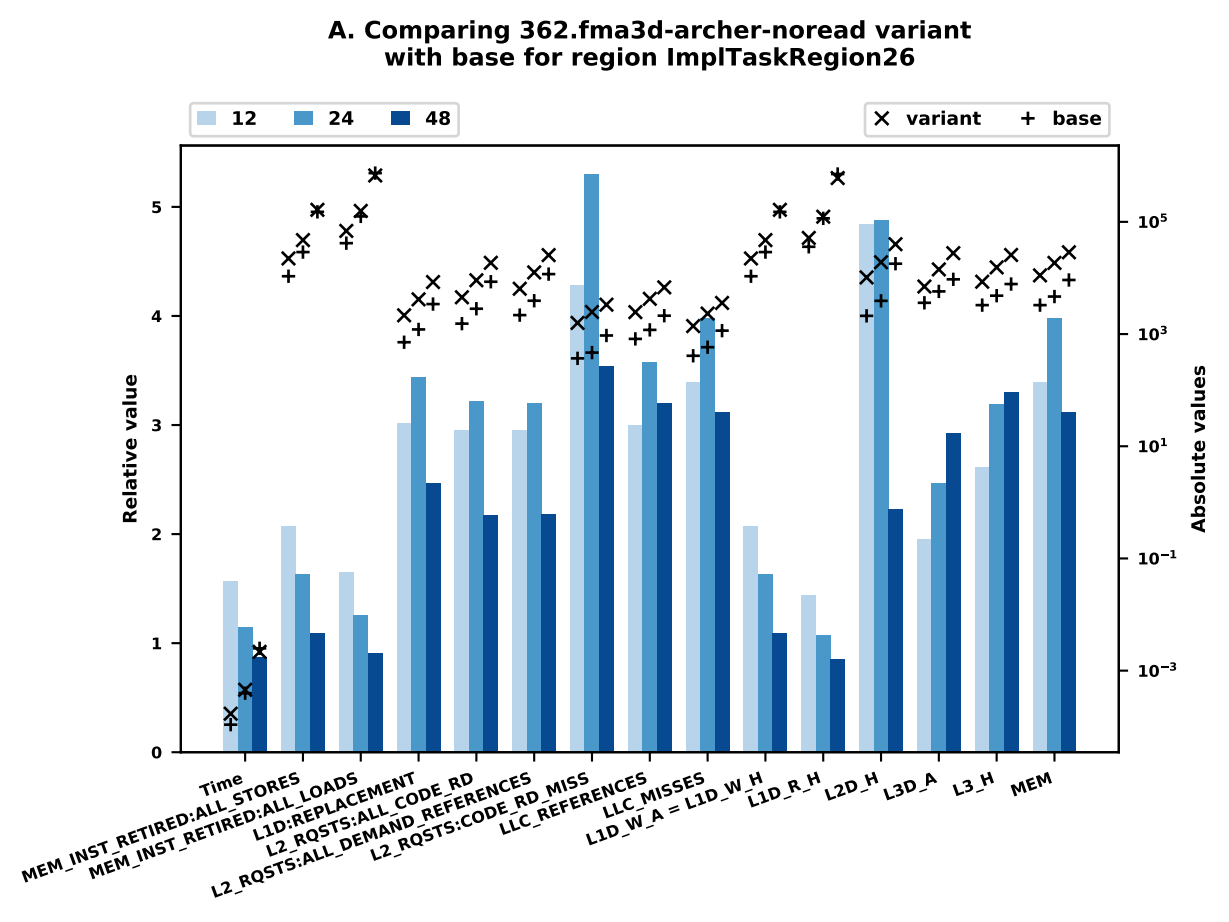

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion25
12
24
48
variant
base
Relative value
Absolute values
0
2
4
6
8
10^{6}
10^{4}
10^{2}
10^{0}
10^{-2}
17.2
13.3
29.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

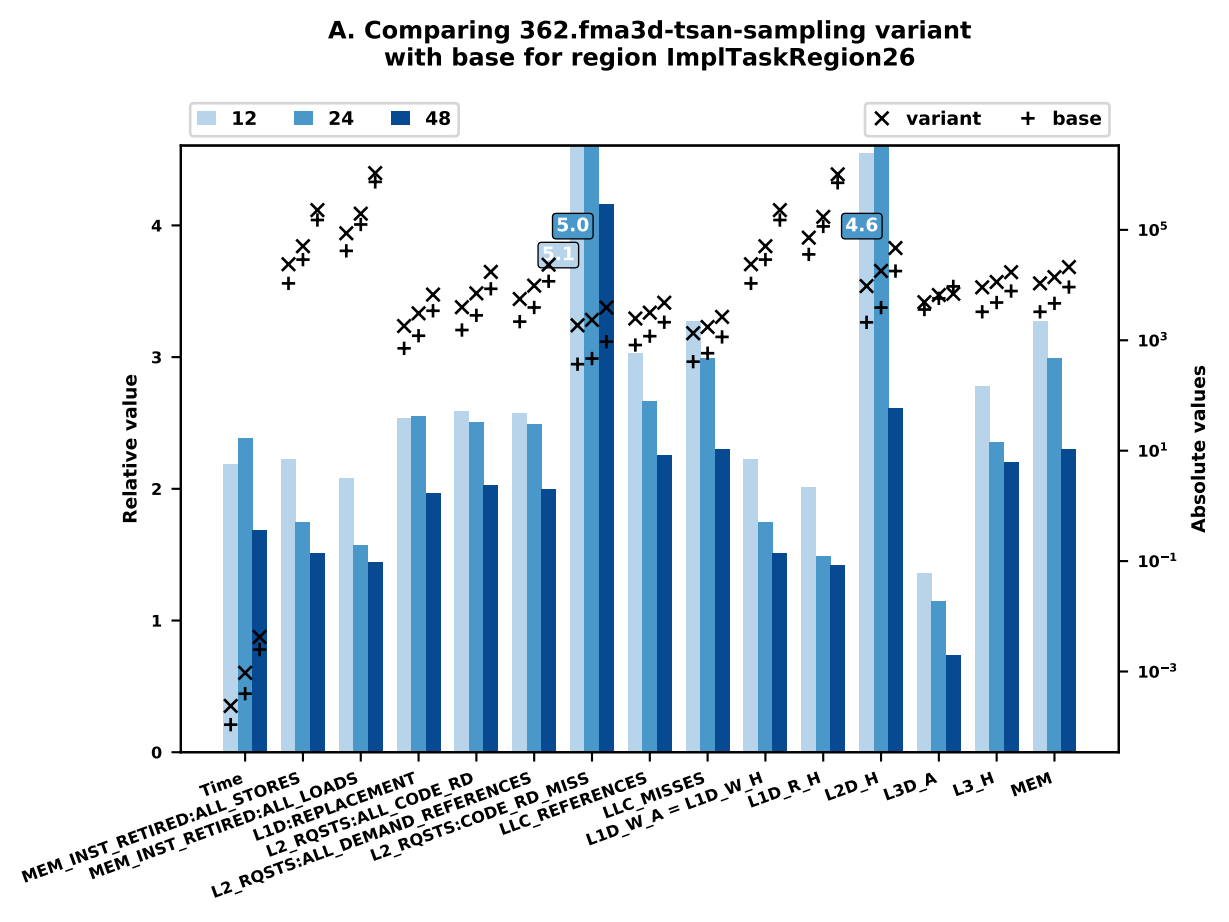

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion25
12
24
48
variant
base
18.3
20.3
16.6
39.3
Relative value
Absolute values
0
2
4
6
8
10
10^{-2}
10^{0}
10^{2}
10^{4}
10^{6}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

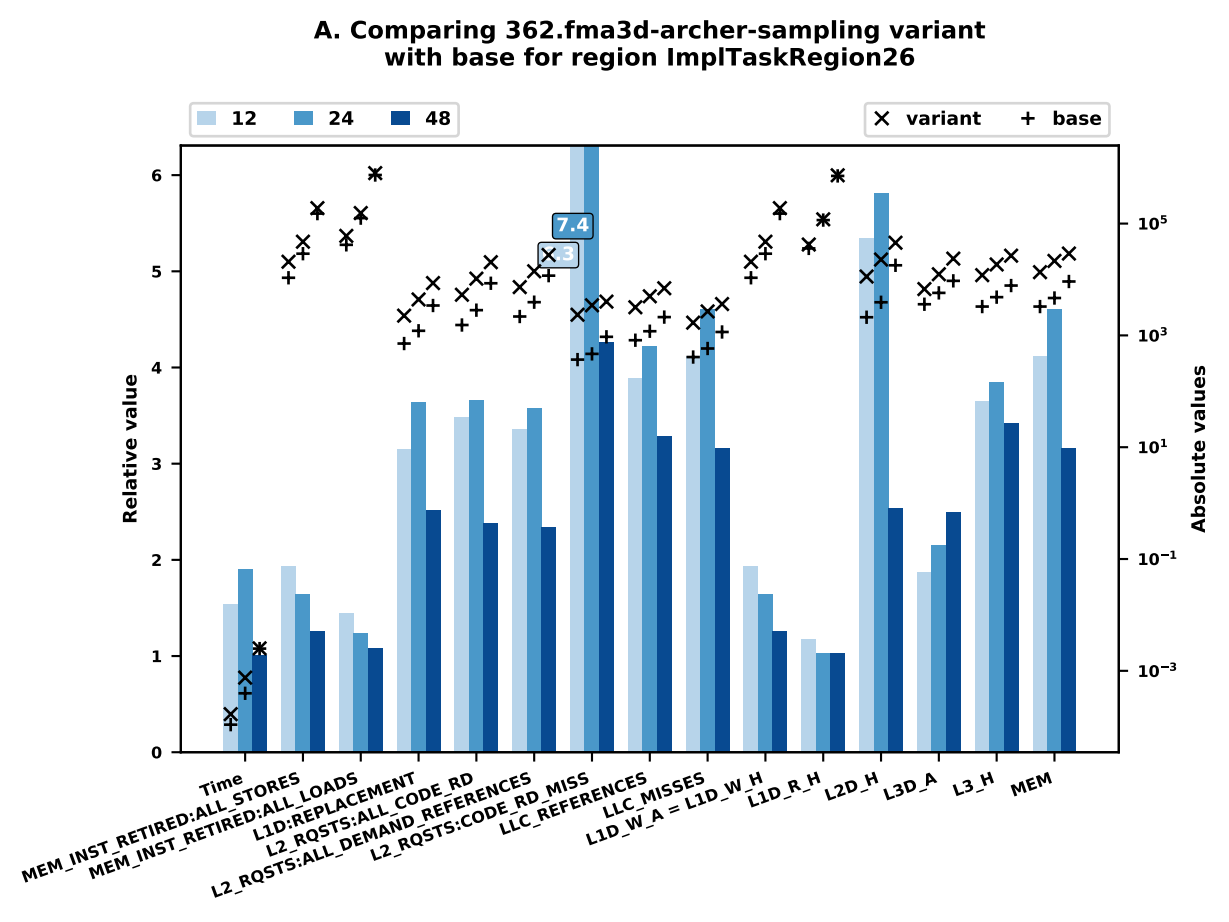

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion25
12
24
48
variant
base
Relative value
Absolute values
16.0
12.6
33.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

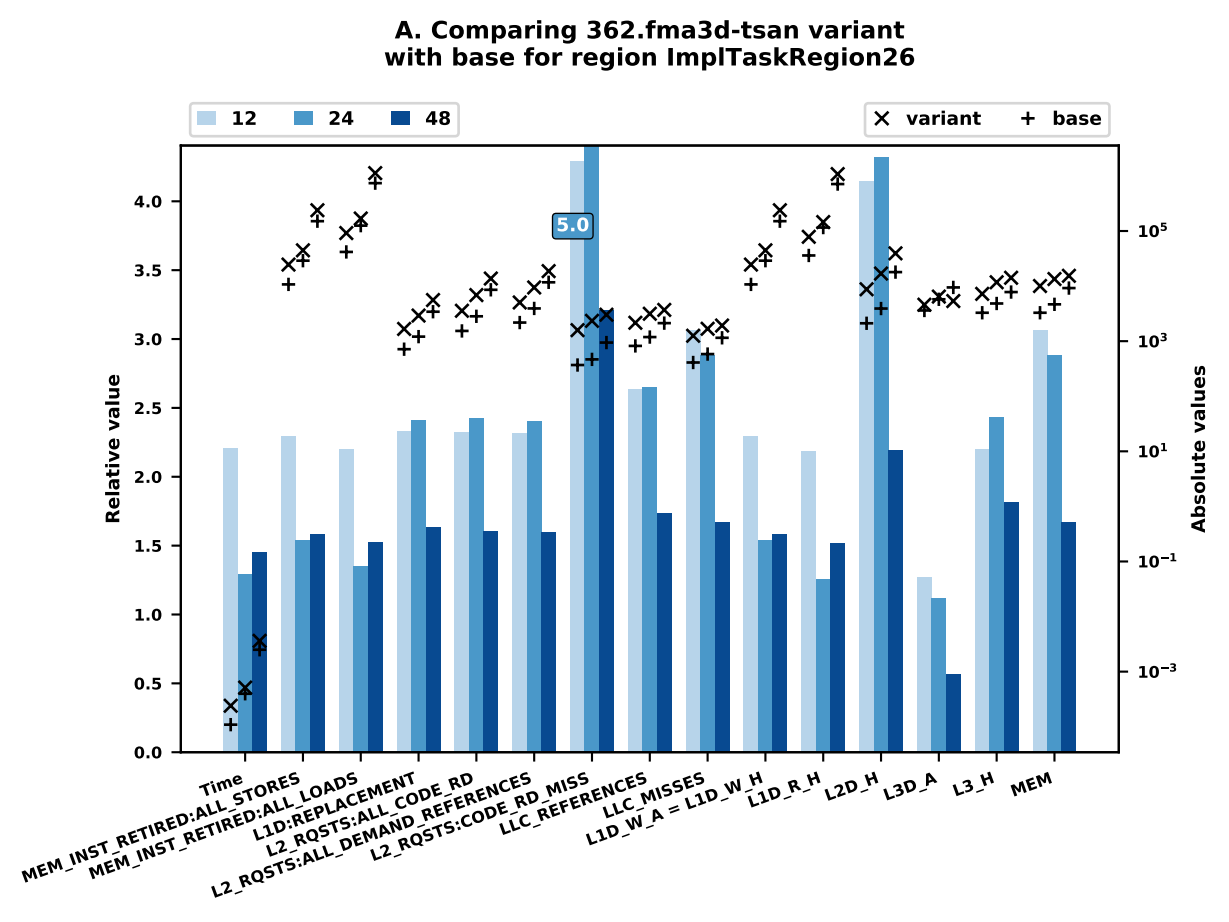

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion25
12
24
48
variant
base
Relative value
Absolute values
16.0
25.2
14.3
36.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

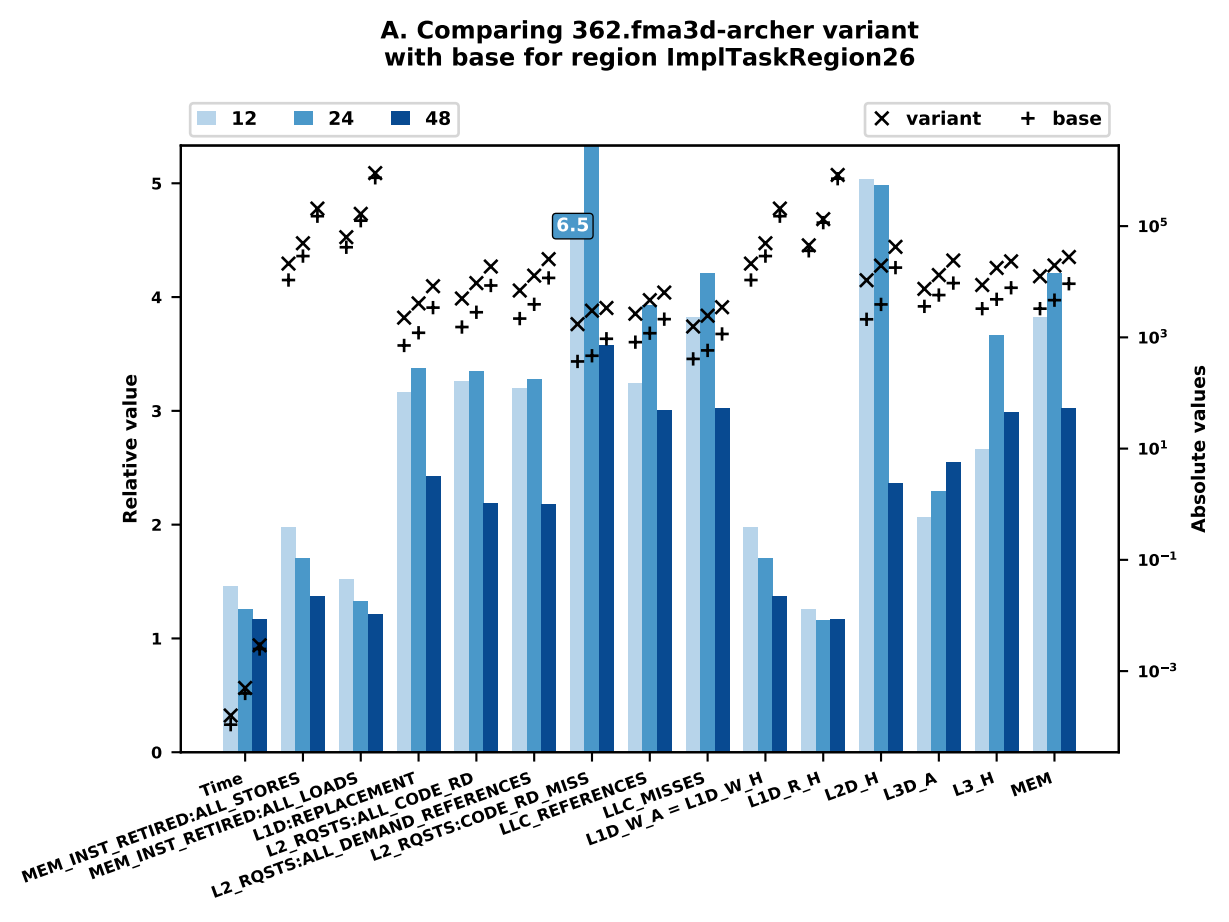

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion26
12
24
48
variant
base
Relative value
Absolute values
4.7
4.6
4.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

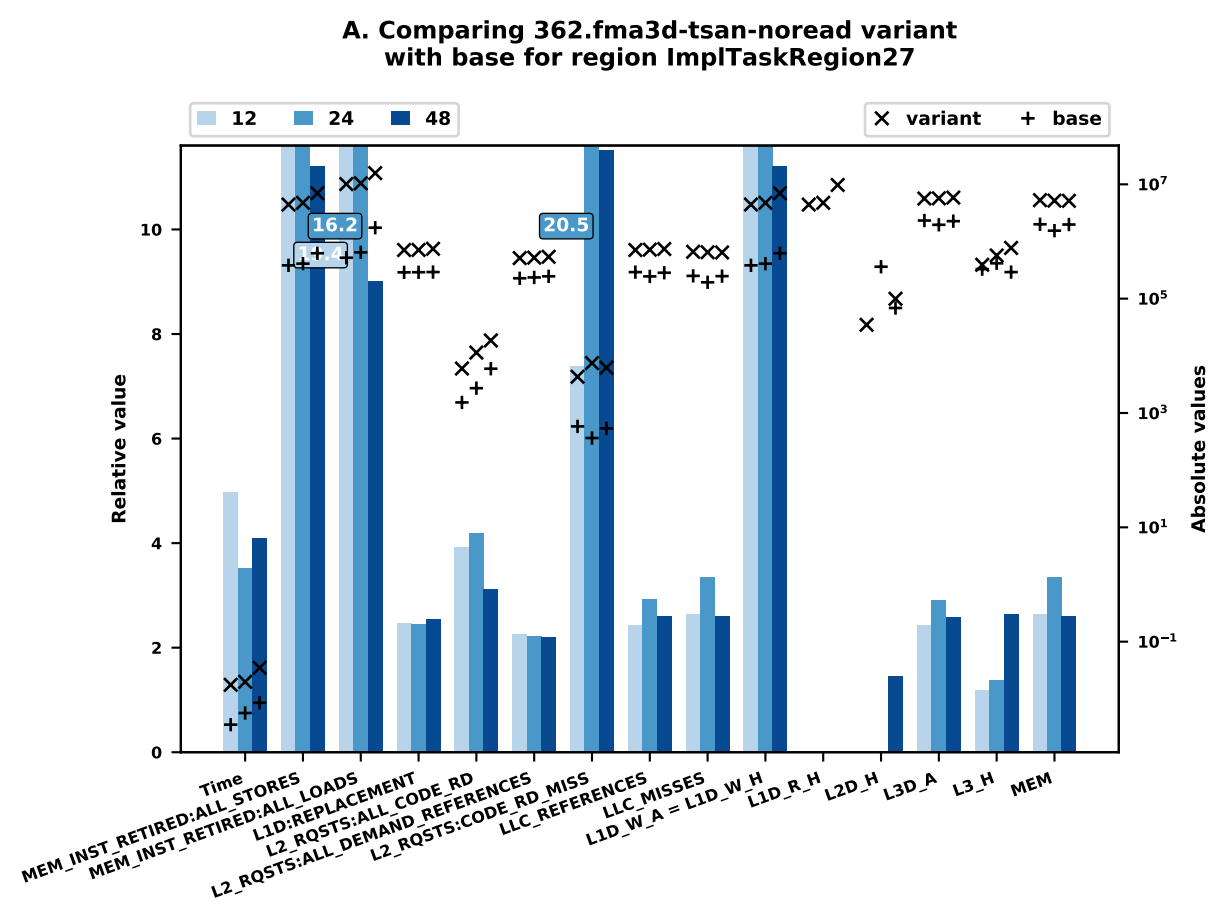

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion26
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

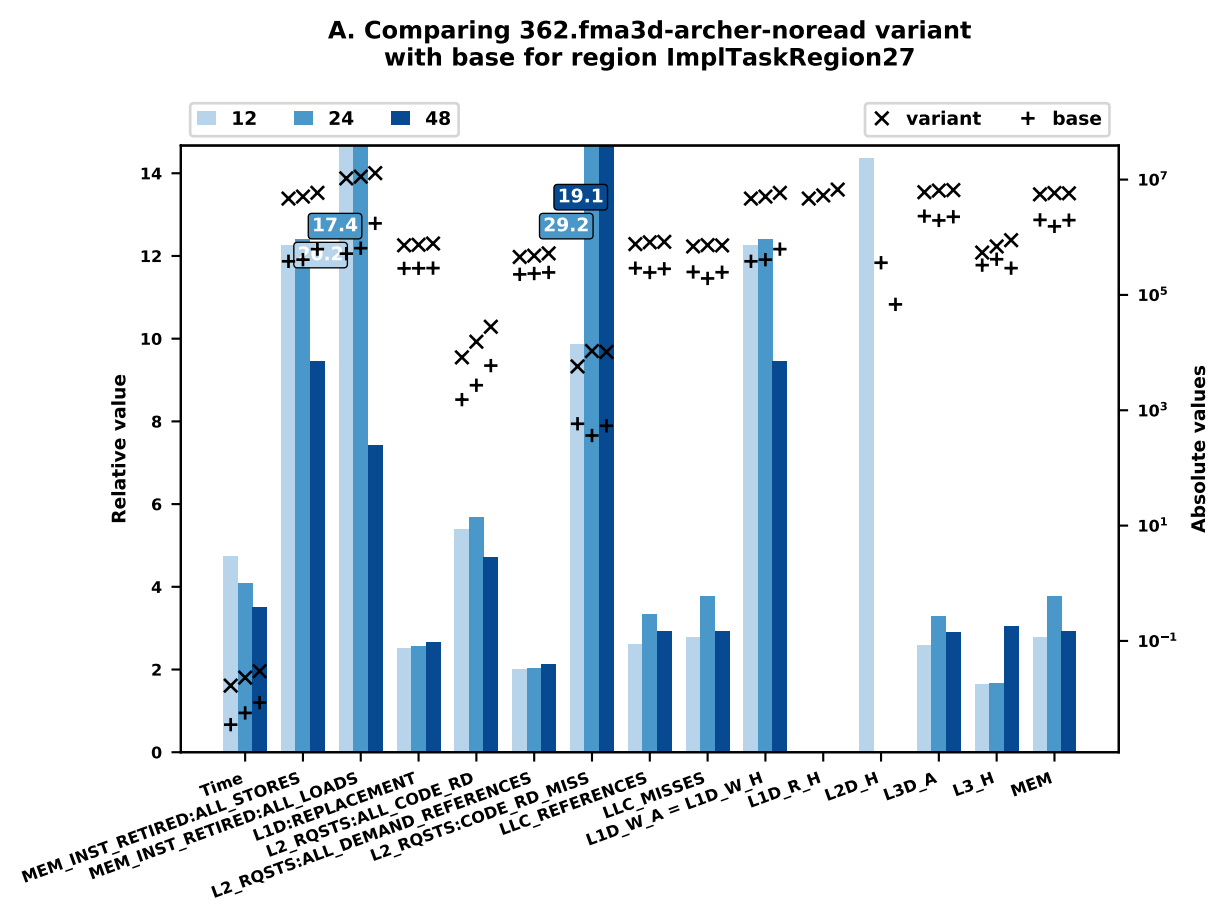

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion26
12
24
48
variant
base
Relative value
Absolute values
5.0
5.1
4.6
0
1
2
3
4
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

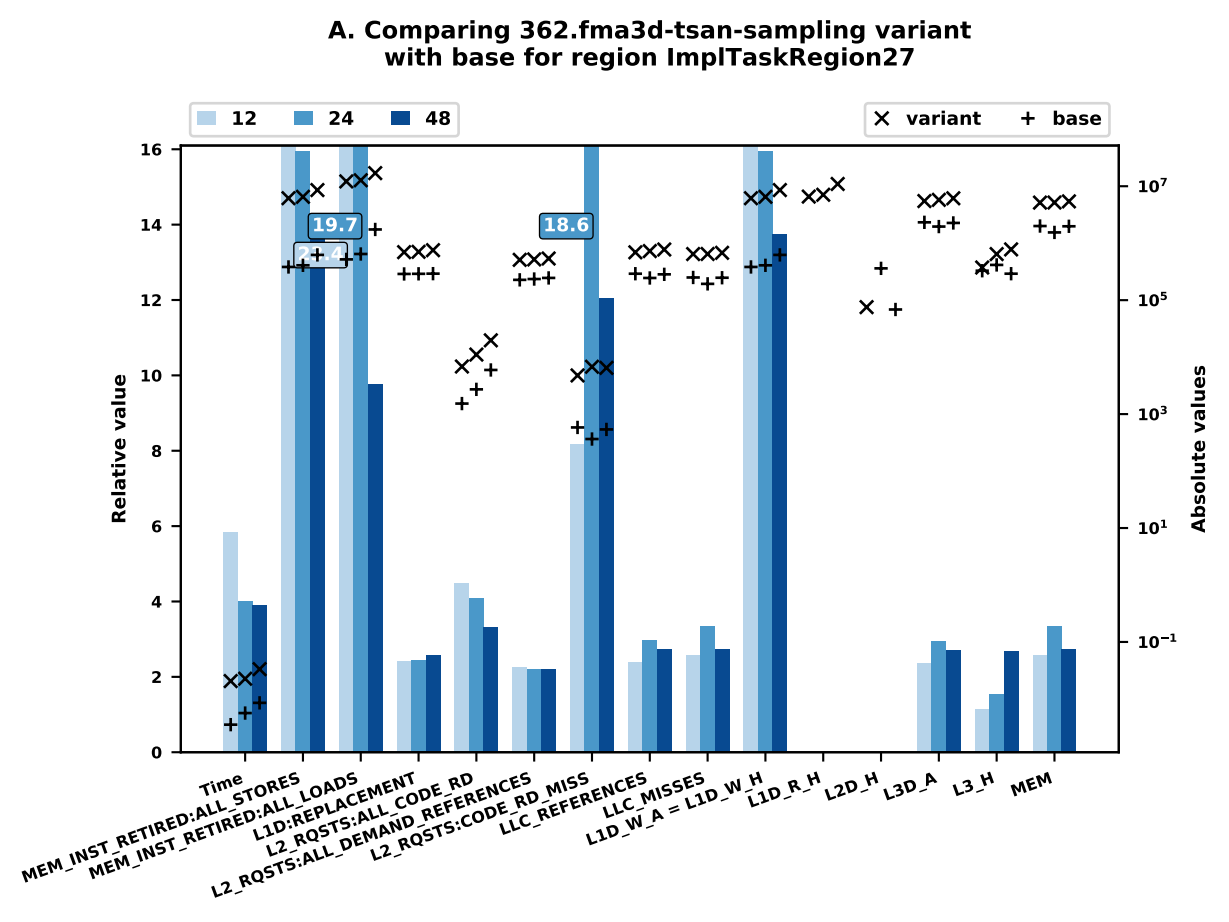

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion26
12
24
48
variant
base
Relative value
Absolute values
7.4
3
0
1
2
3
4
5
6
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

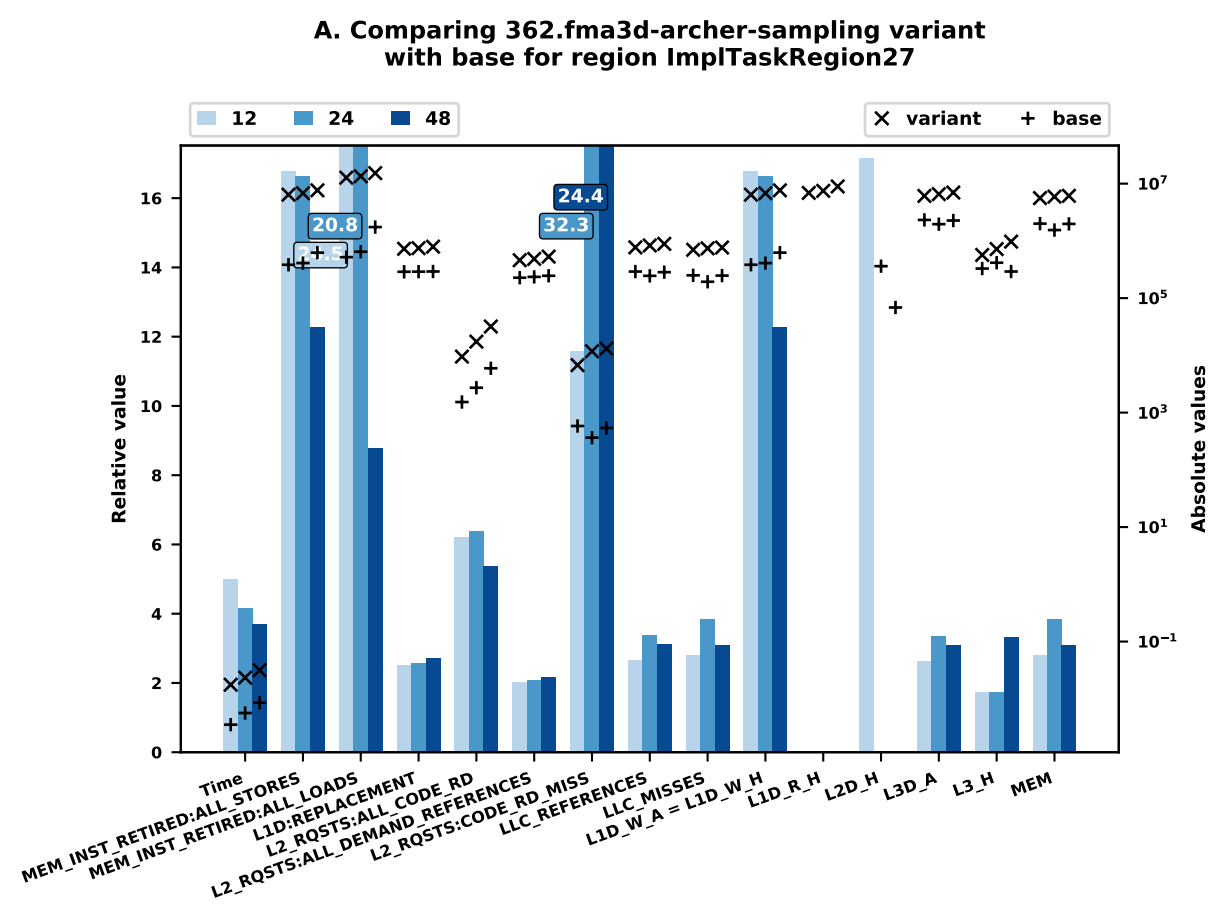

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion26
12
24
48
variant
base
5.0
Relative value
Absolute values
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

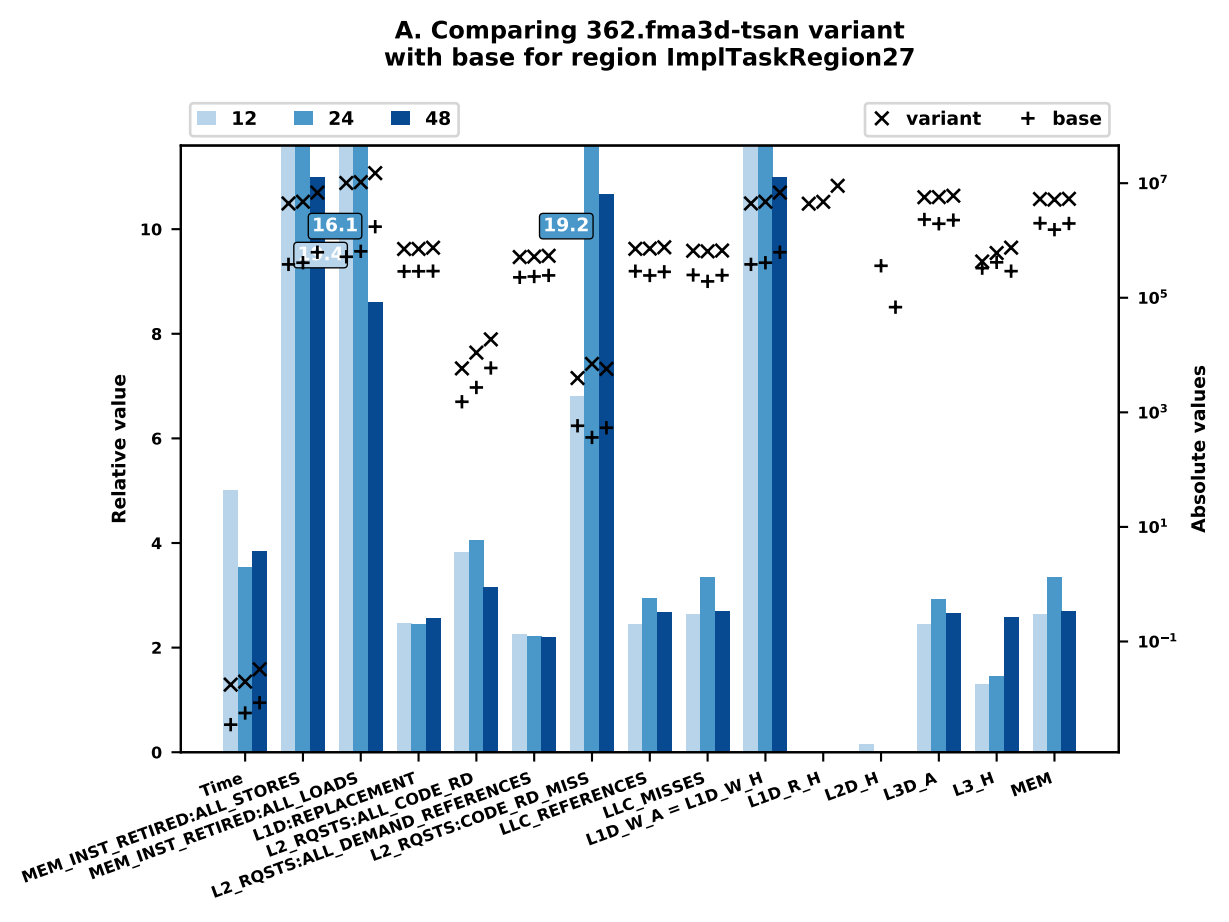

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion26
12
24
48
variant
base
6.5
Relative value
Absolute values
0
1
2
3
4
5
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

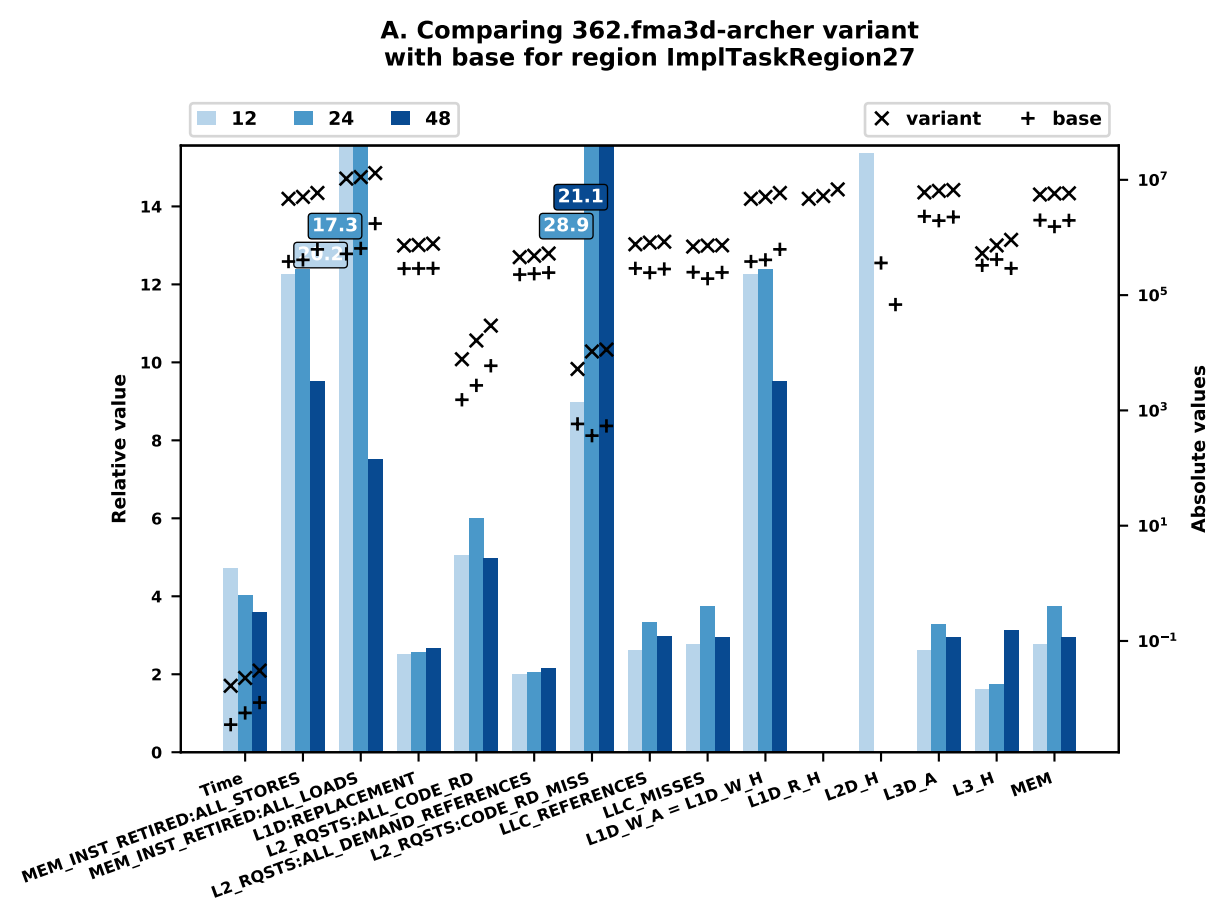

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion27
12
24
48
variant
base
16.2
20.5
Relative value
Absolute values
0
2
4
6
8
10
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

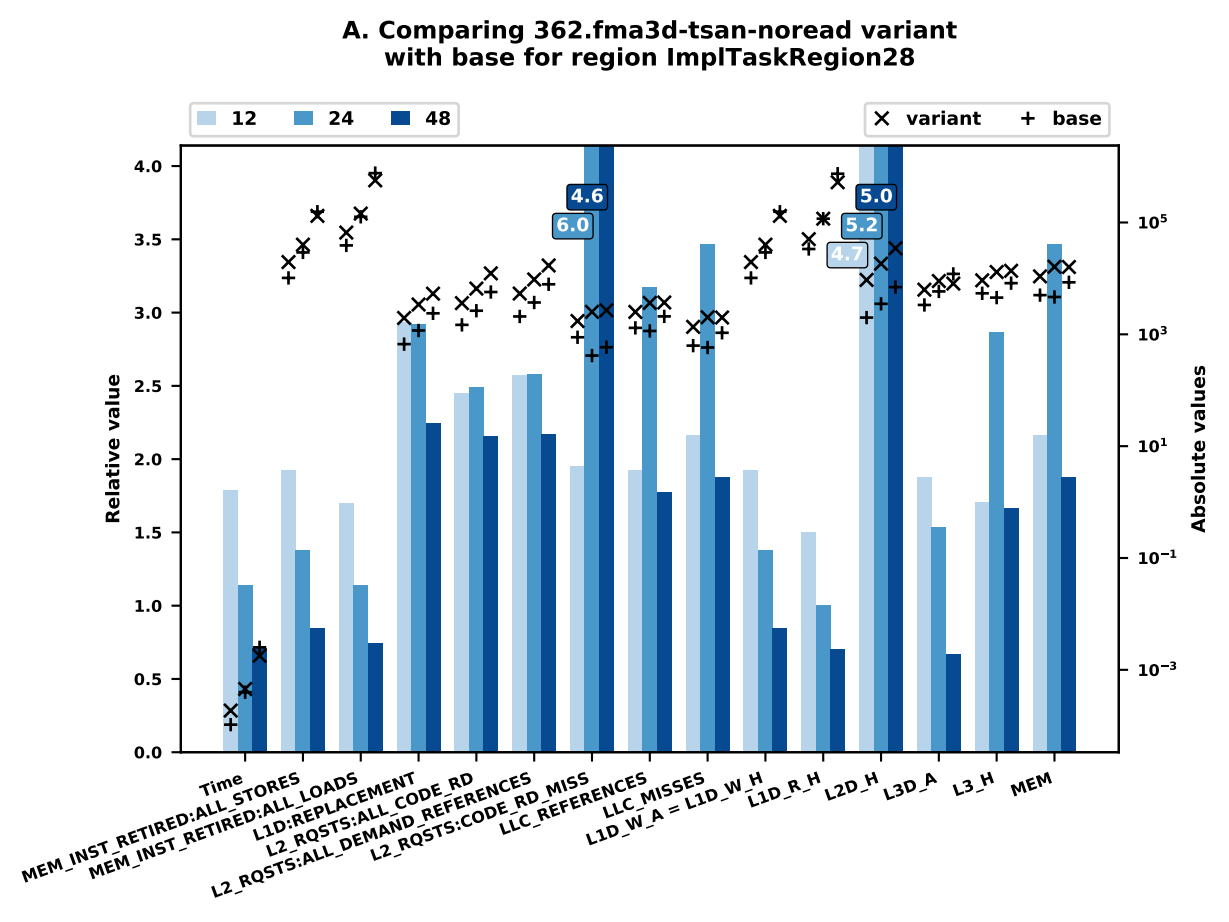

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion27
12
24
48
variant
base
Relative value
Absolute values
17.4
19.1
29.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

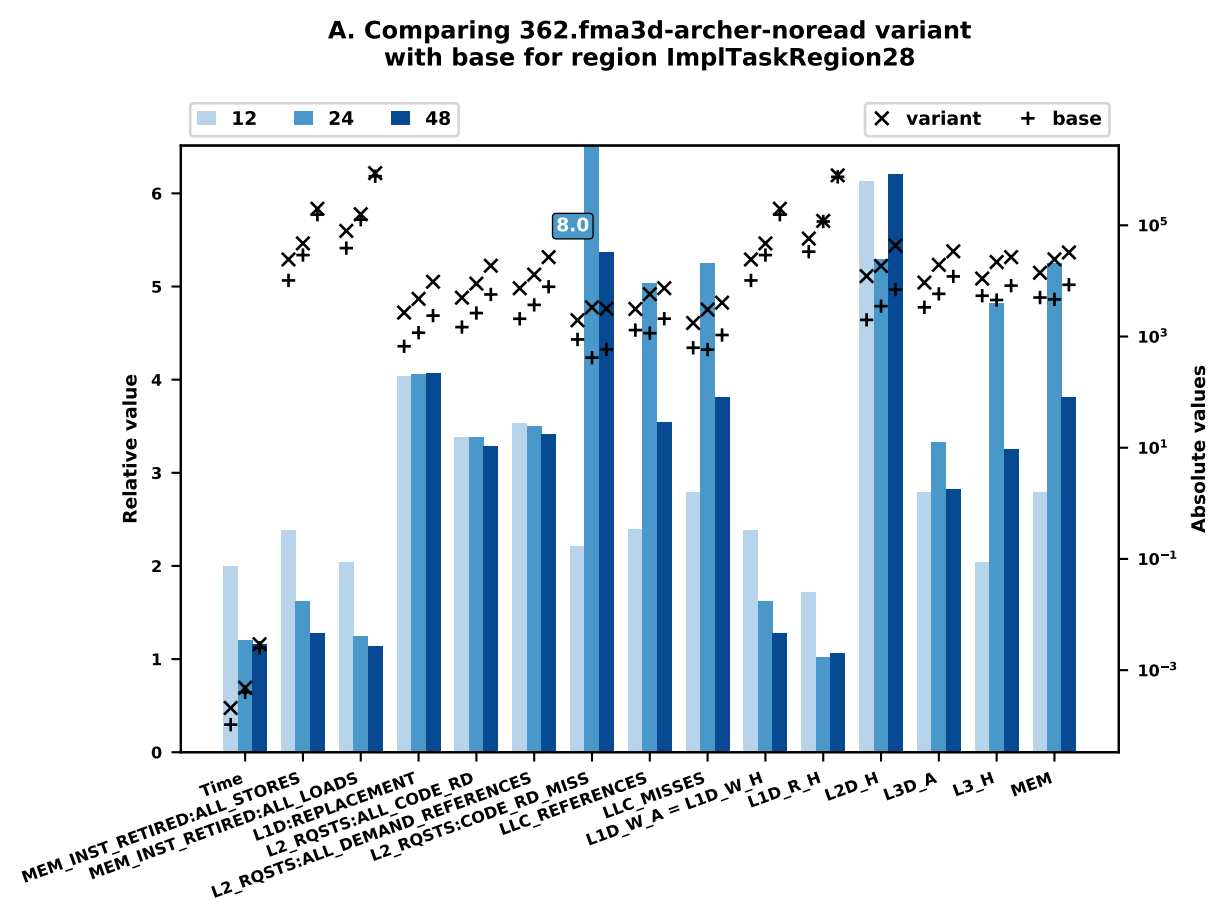

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion27
12
24
48
variant
base
Relative value
Absolute values
19.7
18.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

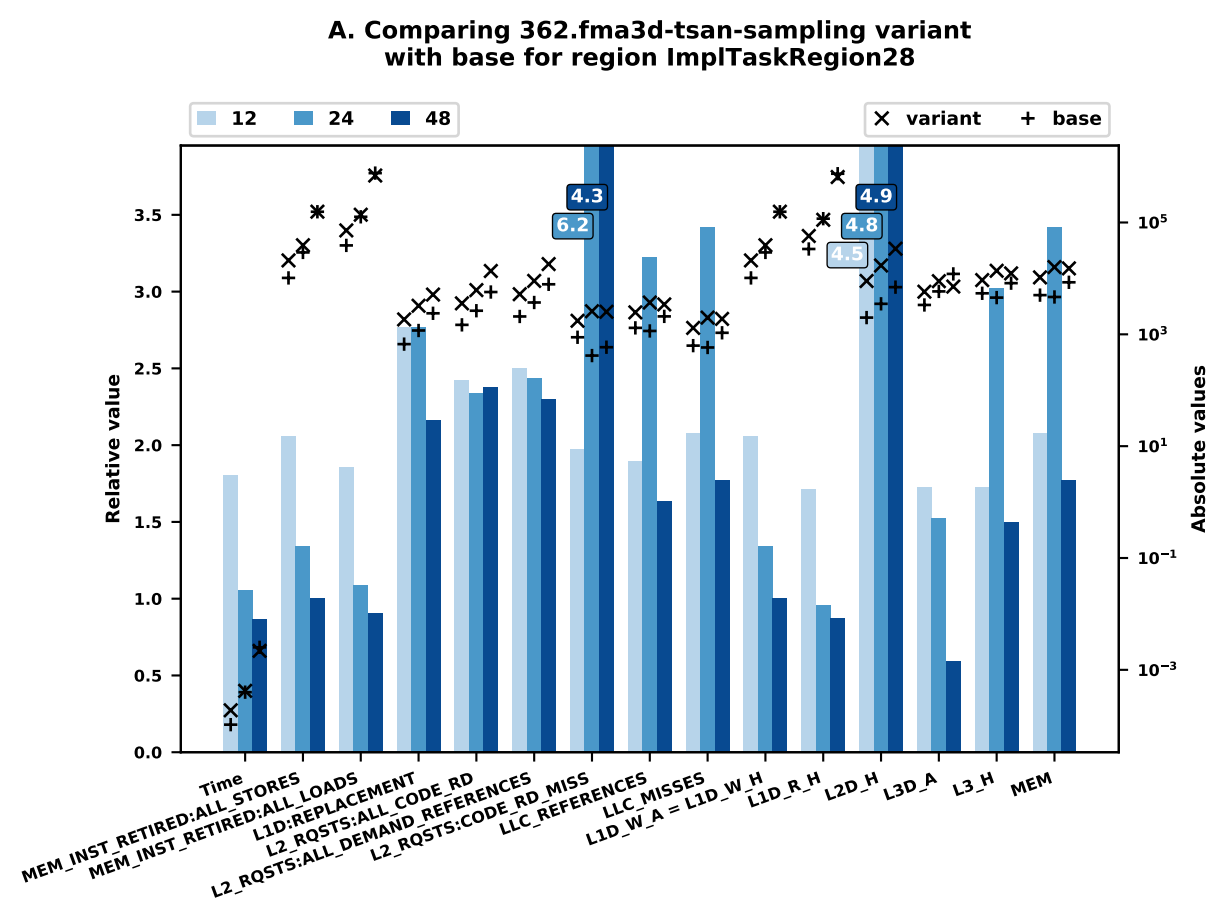

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion27
12
24
48
variant
base
Relative value
Absolute values
20.8
24.4
32.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

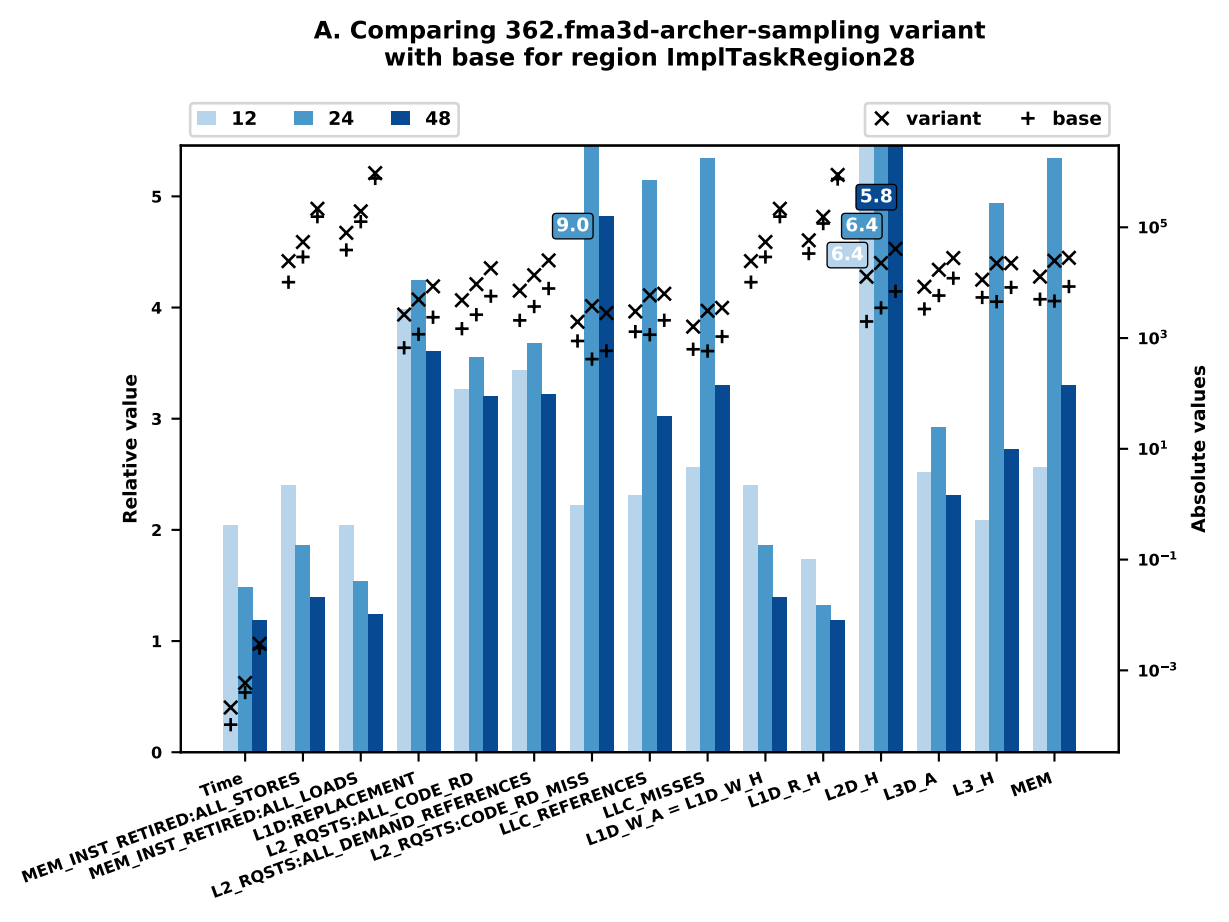

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion27
12
24
48
variant
base
16.1
19.2
Relative value
Absolute values
0
2
4
6
8
10
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

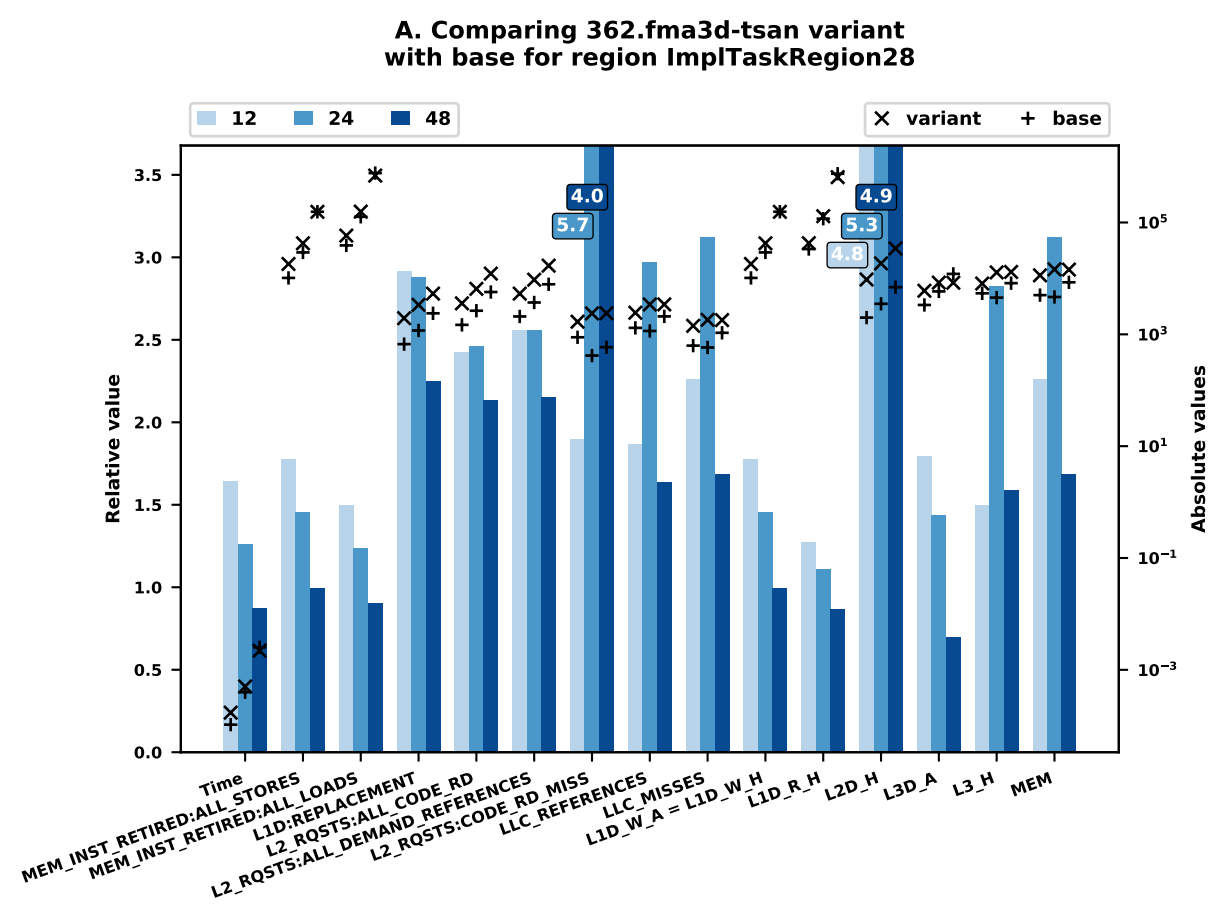

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion27
12
24
48
variant
base
Relative value
Absolute values
17.3
21.1
28.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

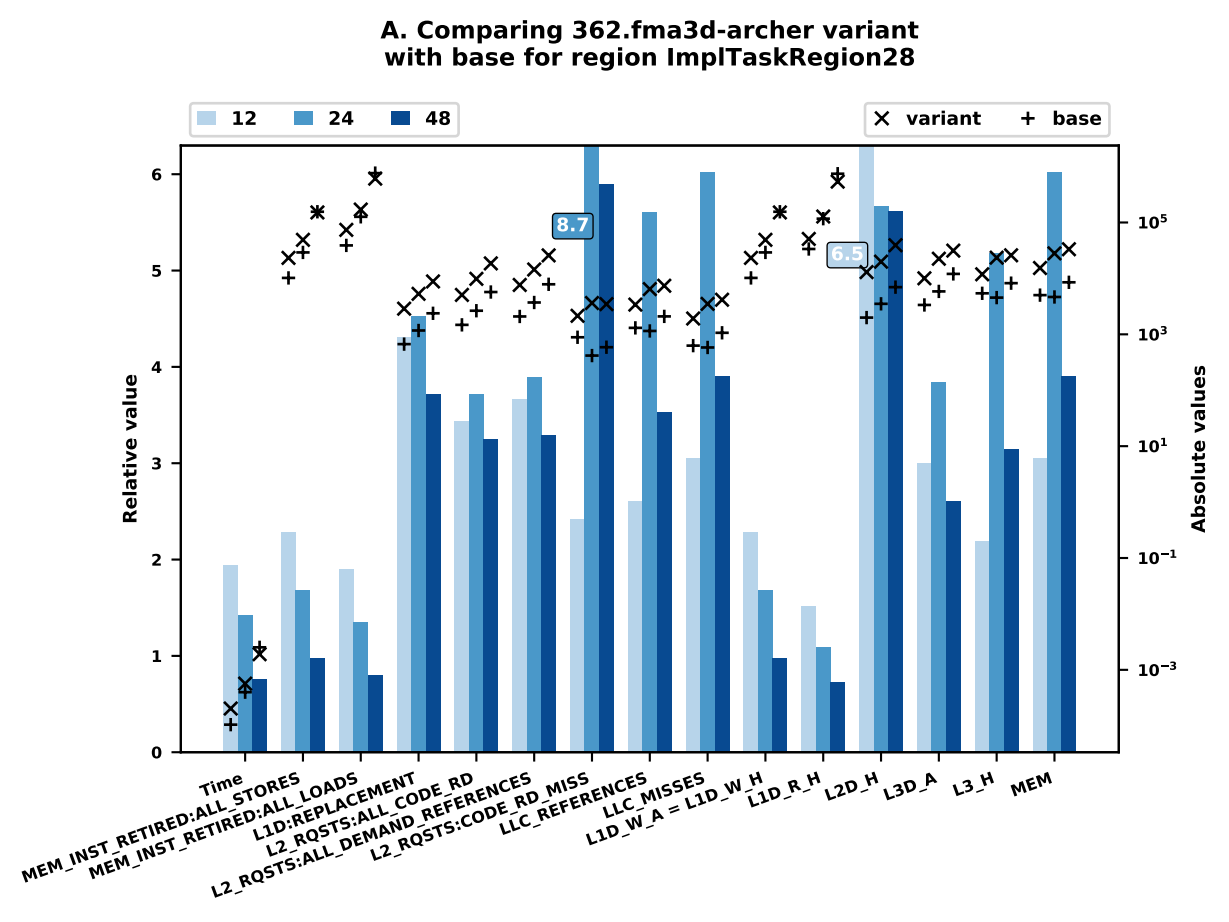

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion28
12
24
48
variant
base
Relative value
Absolute values
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
4.6
6.0
5.0
5.2
4.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

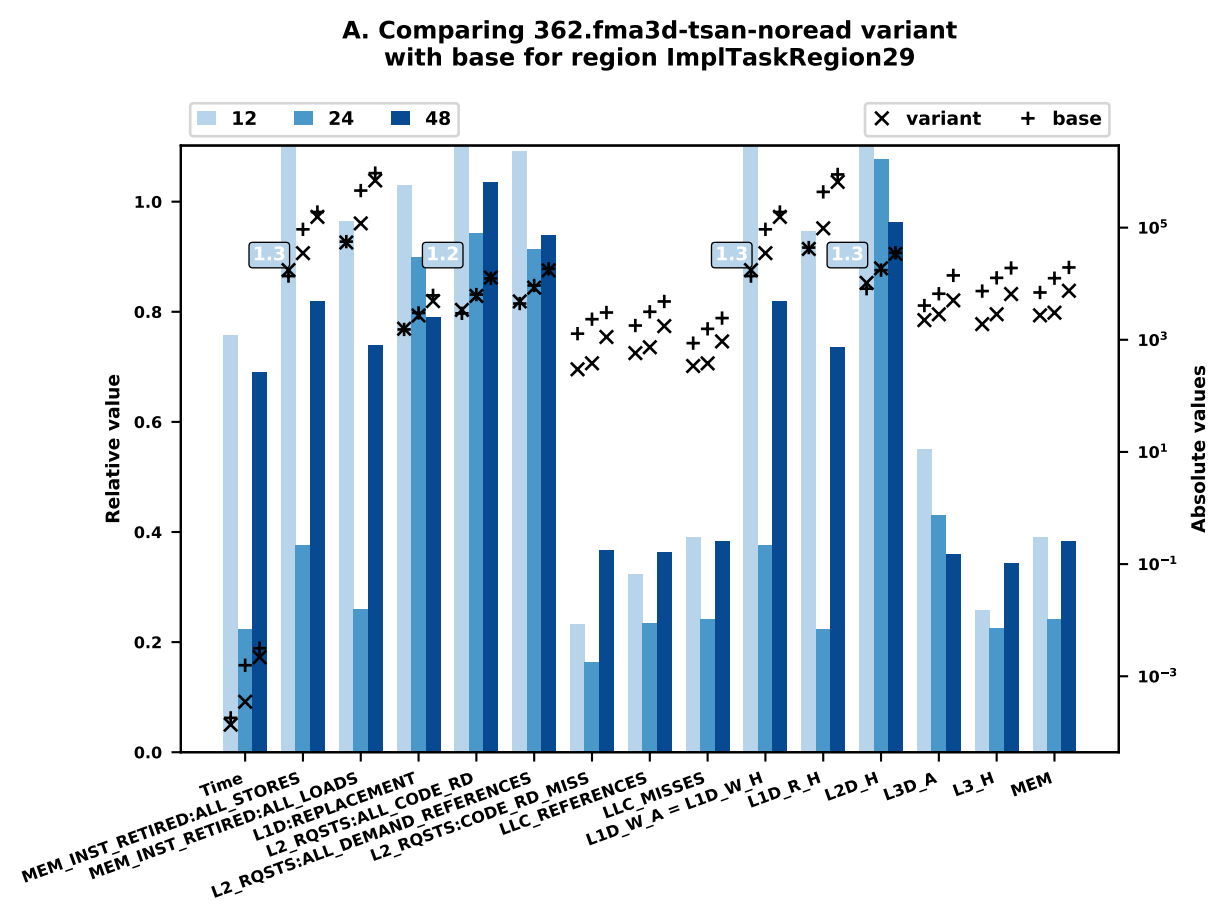

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion28
12
24
48
variant
base
8.0
Relative value
Absolute values
0
1
2
3
4
5
6
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

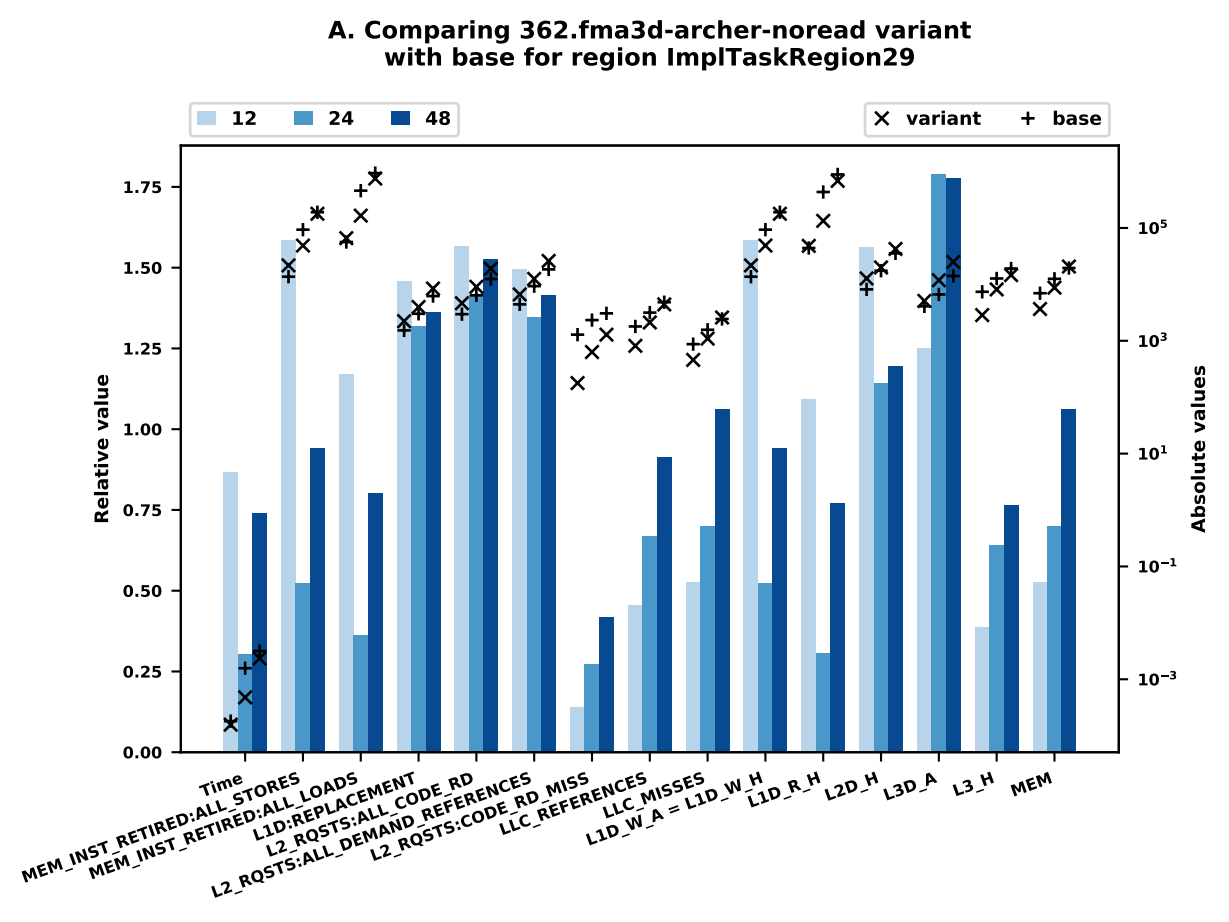

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion28
12
24
48
variant
base
Relative value
Absolute values
4.3
6.2
4.9
4.8
4.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

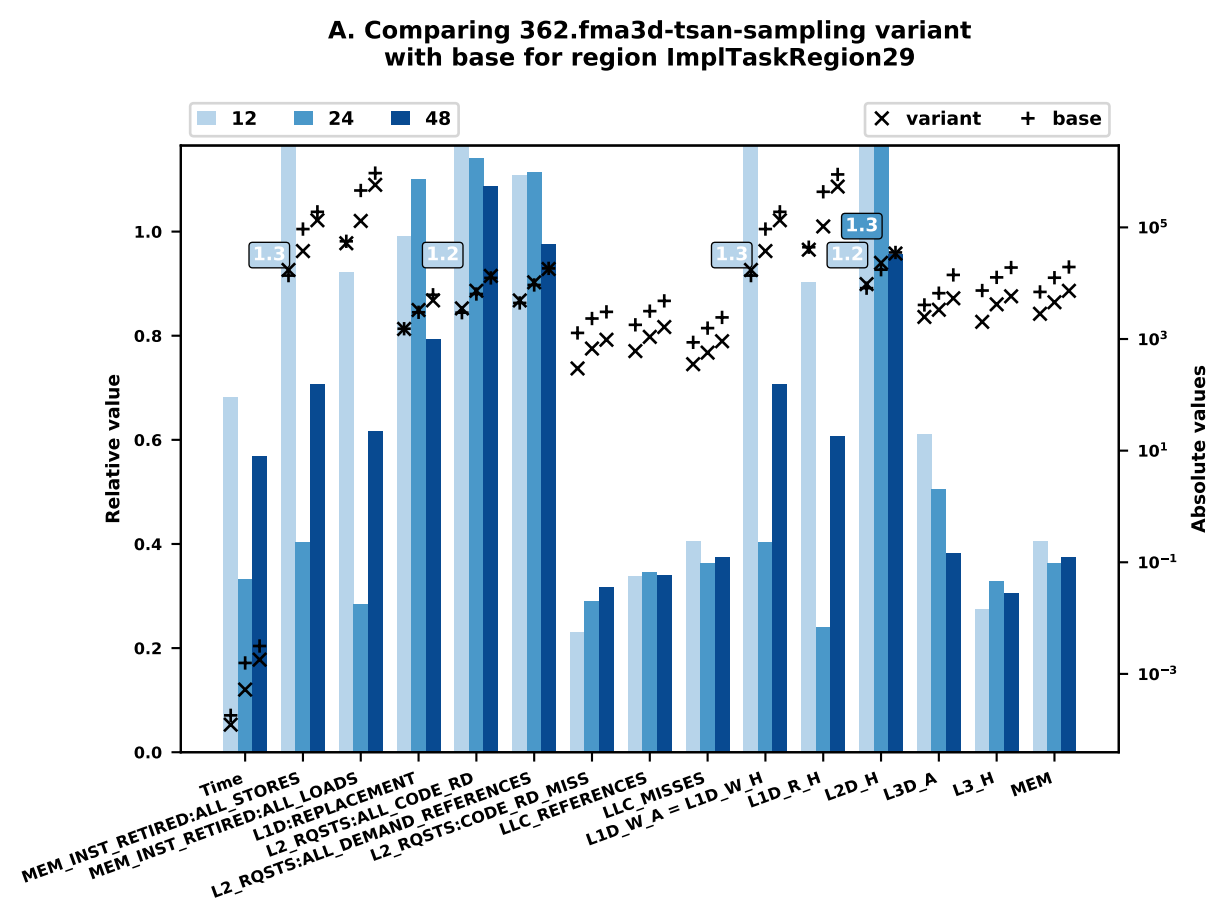

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion28
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
9.0
5.8
6.4
6.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

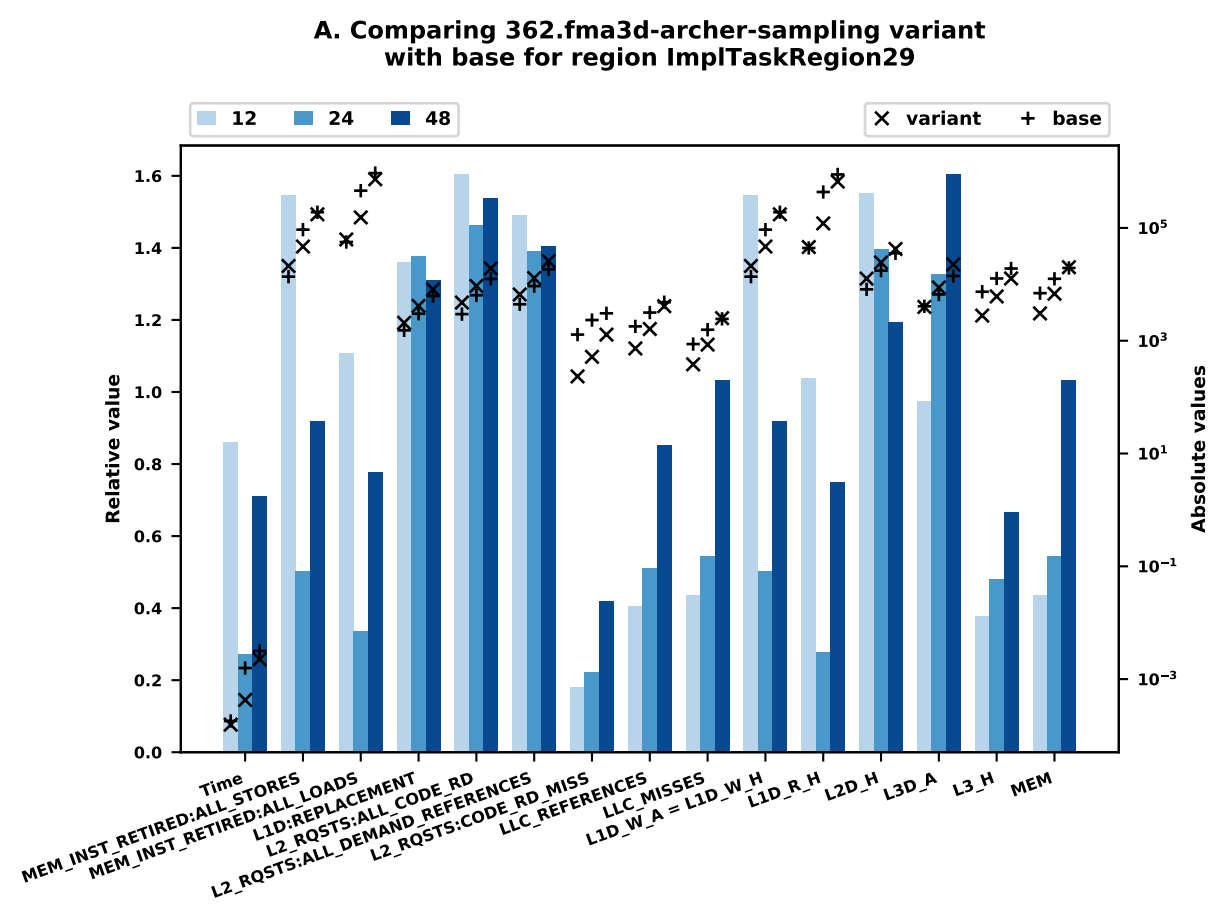

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion28
12
24
48
variant
base
Relative value
Absolute values
4.0
5.7
4.9
5.3
4.8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

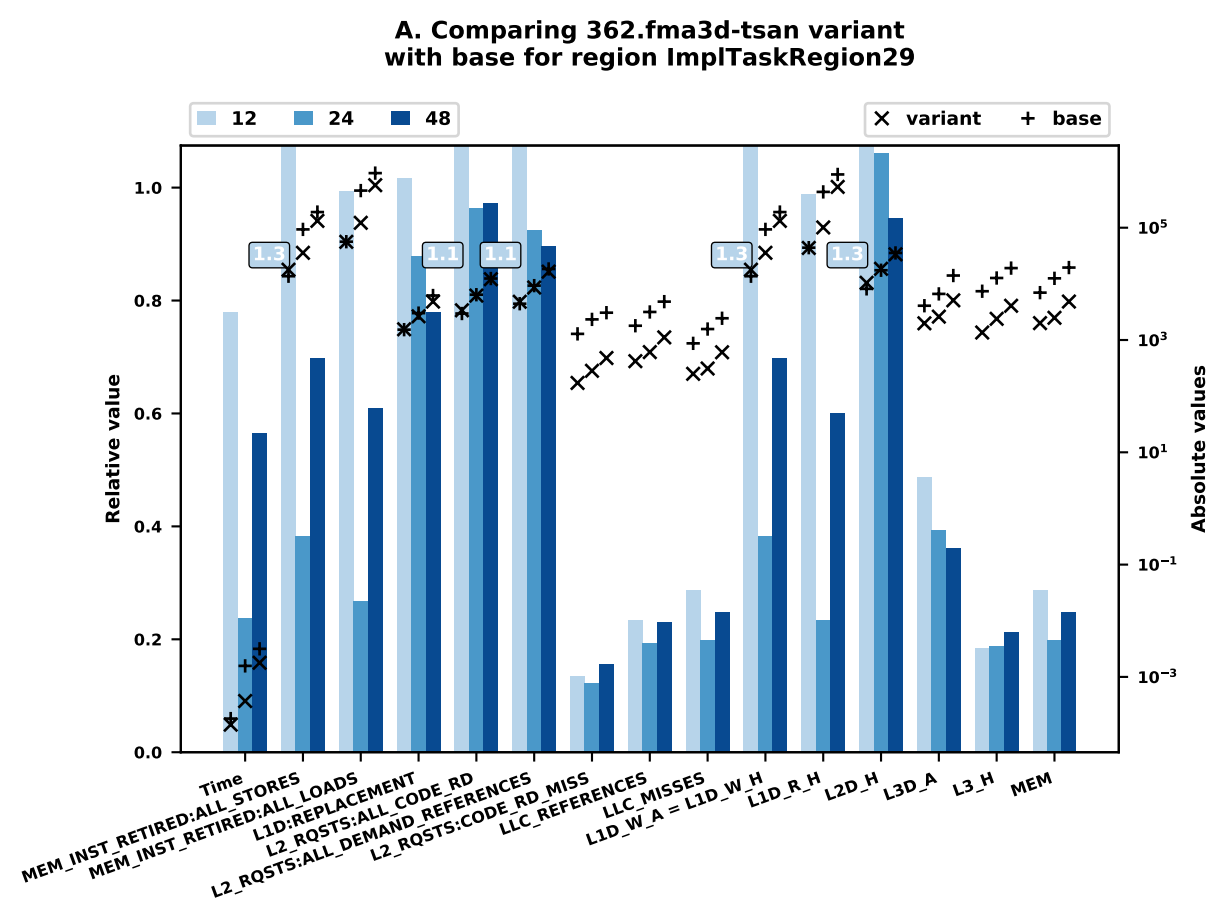

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion28
12
24
48
variant
base
Relative value
Absolute values
8.7
6.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

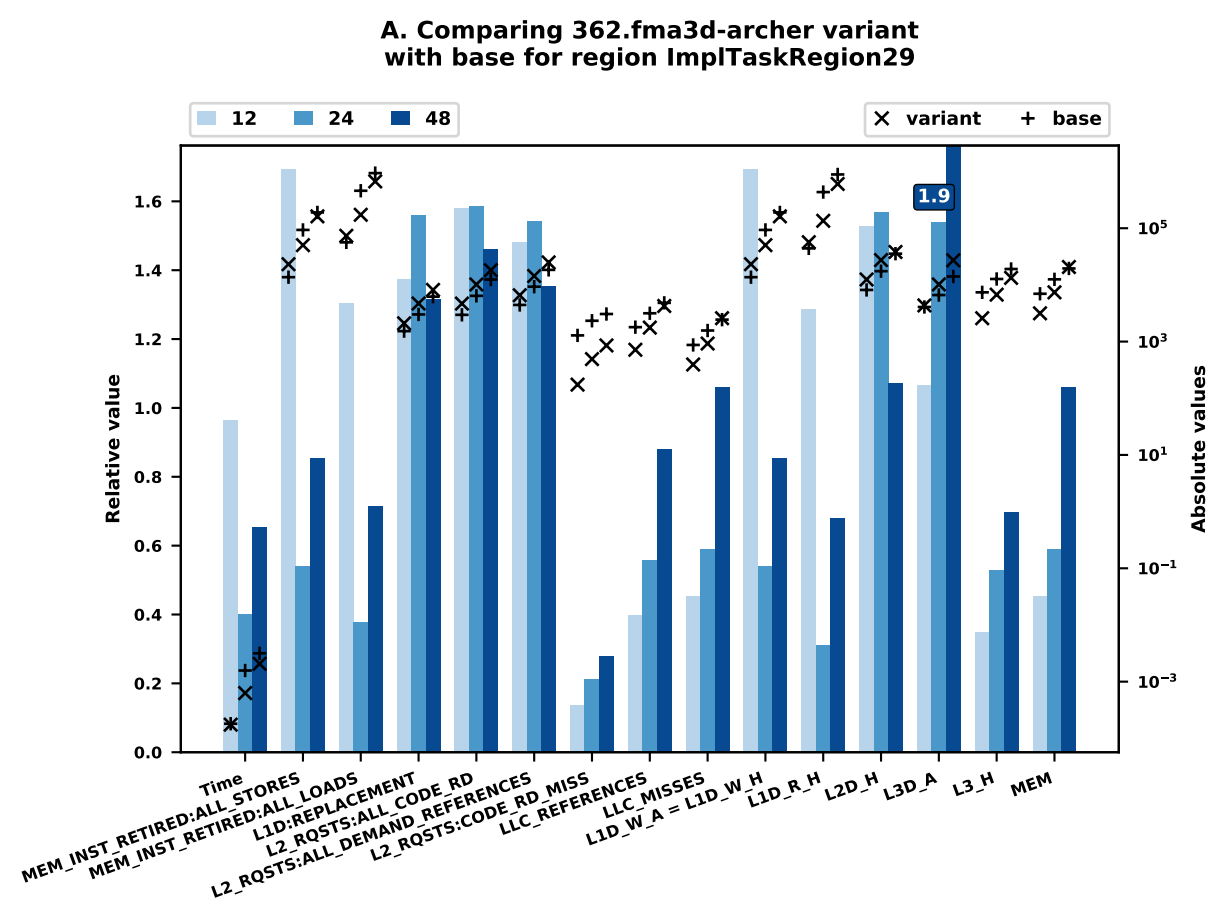

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion29
12
24
48
variant
base
1.3
1.2
1.3
1.3
Relative value
Absolute values
0.0
0.2
0.4
0.6
0.8
1.0
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

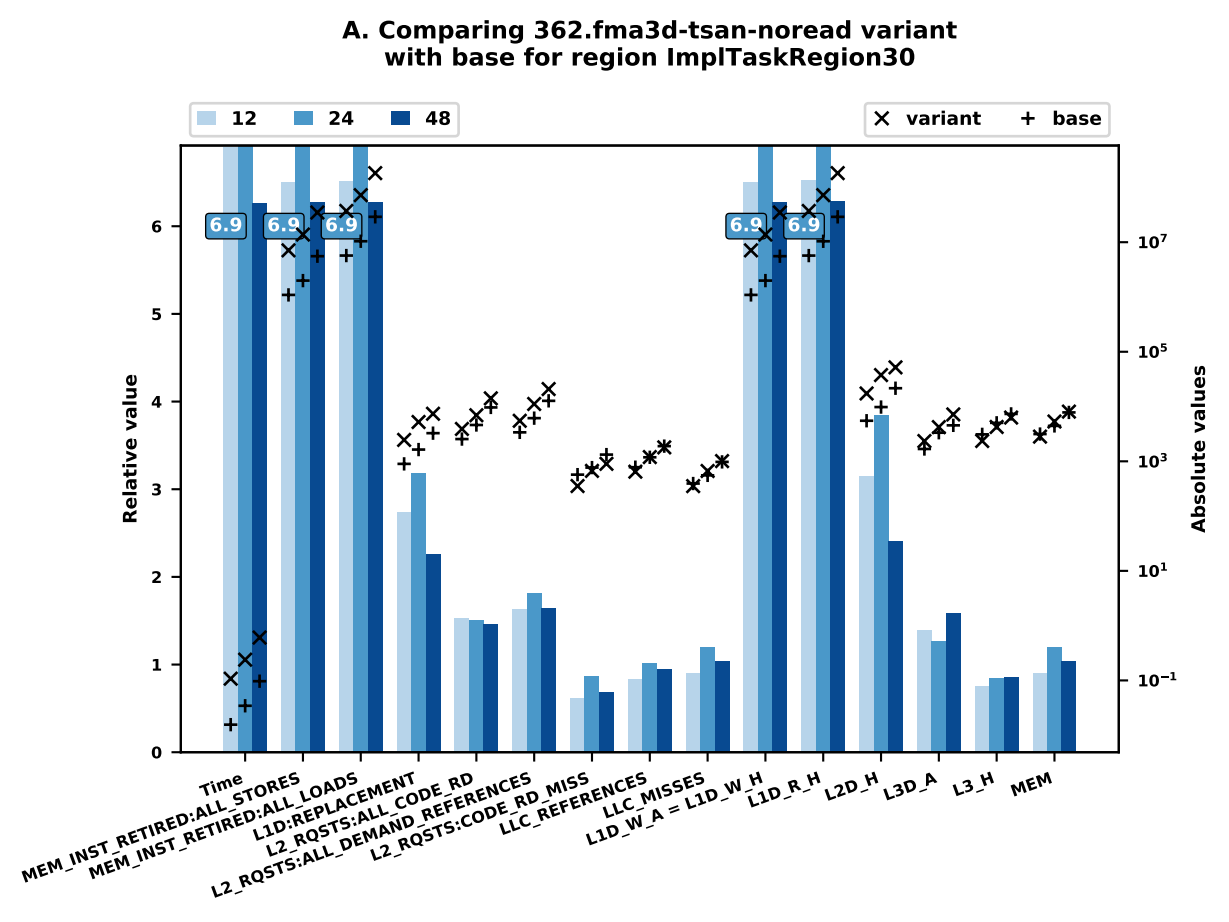

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion29
12
24
48
variant
base
Relative value
Absolute values
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

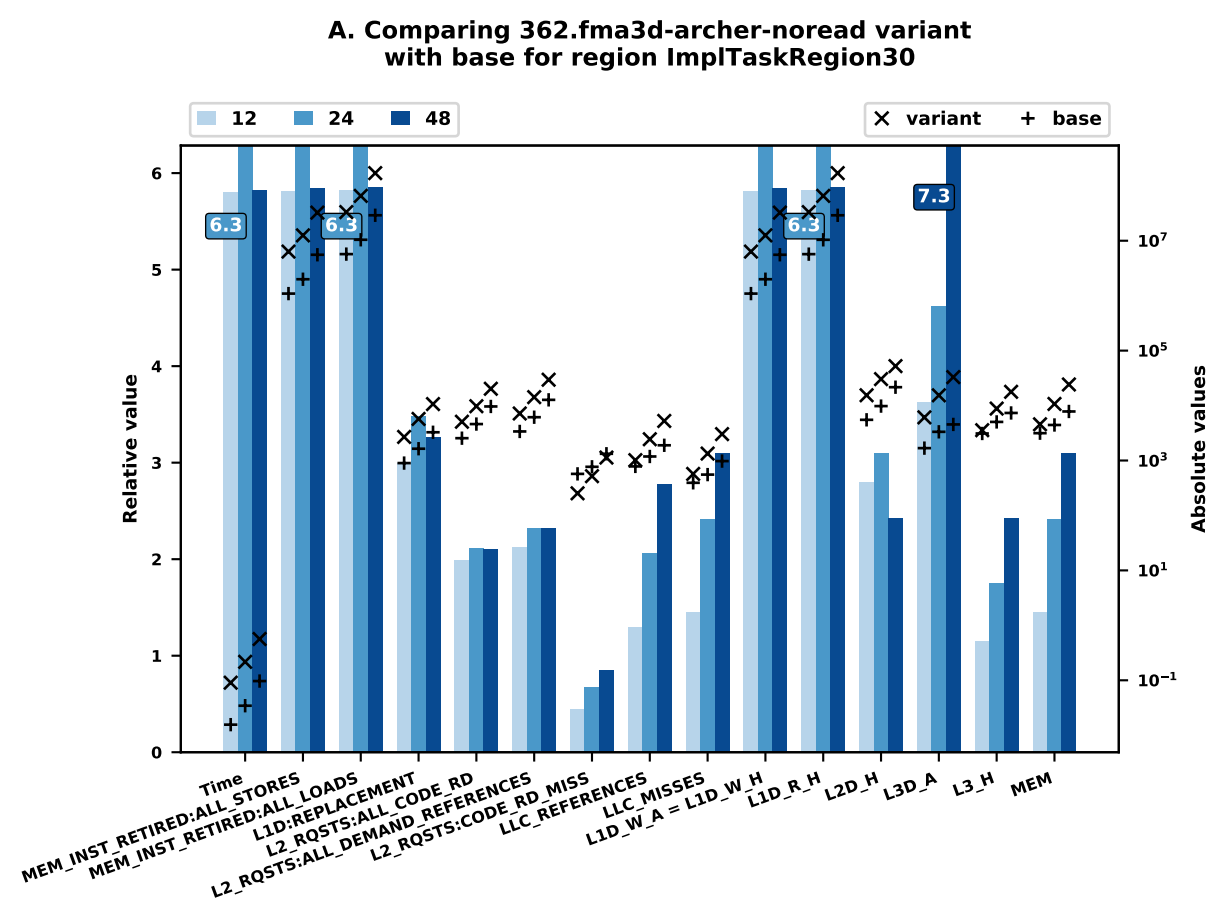

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion29
12
24
48
variant
base
Relative value
Absolute values
1.0
0.8
0.6
0.4
0.2
0.0
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
1.3
1.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

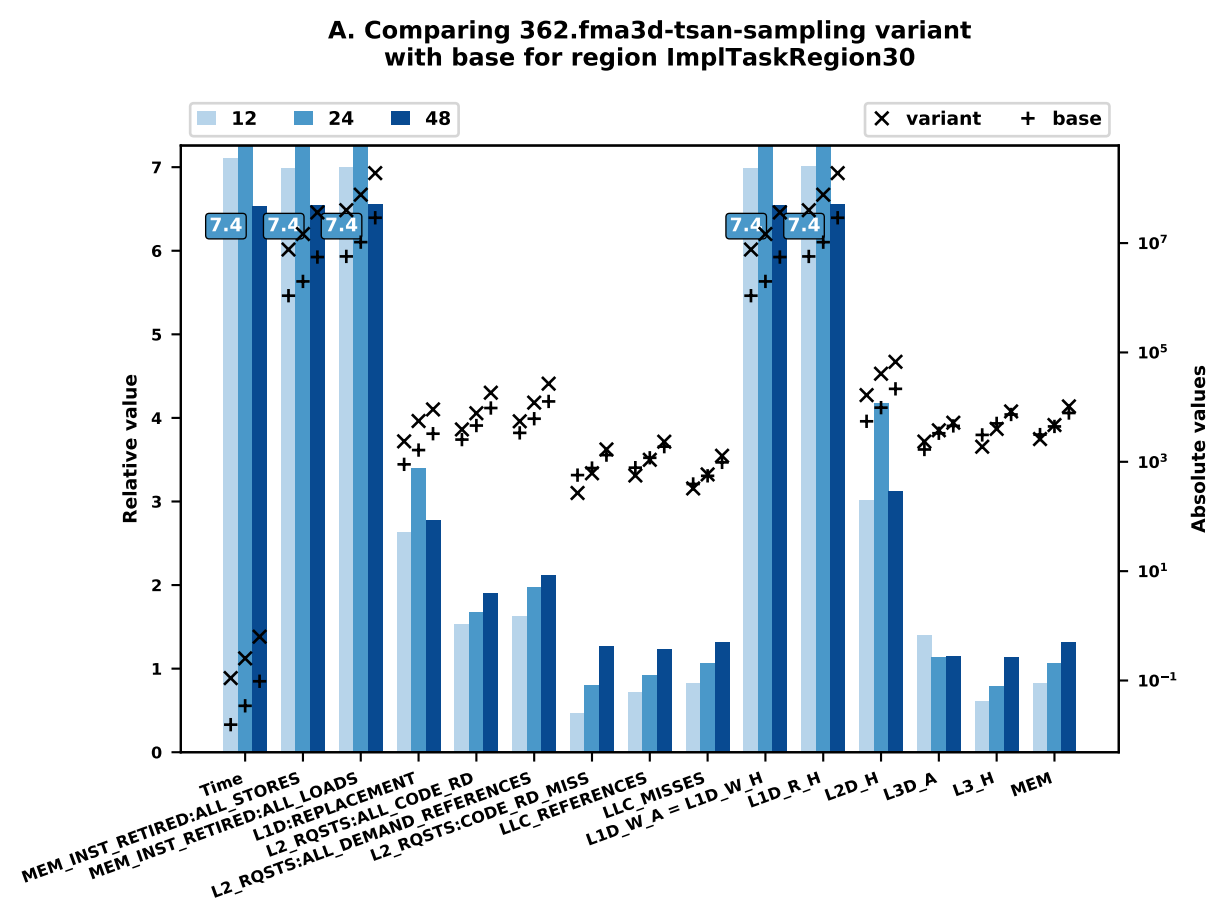

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion29
12
24
48
variant
base
Relative value
Absolute values
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

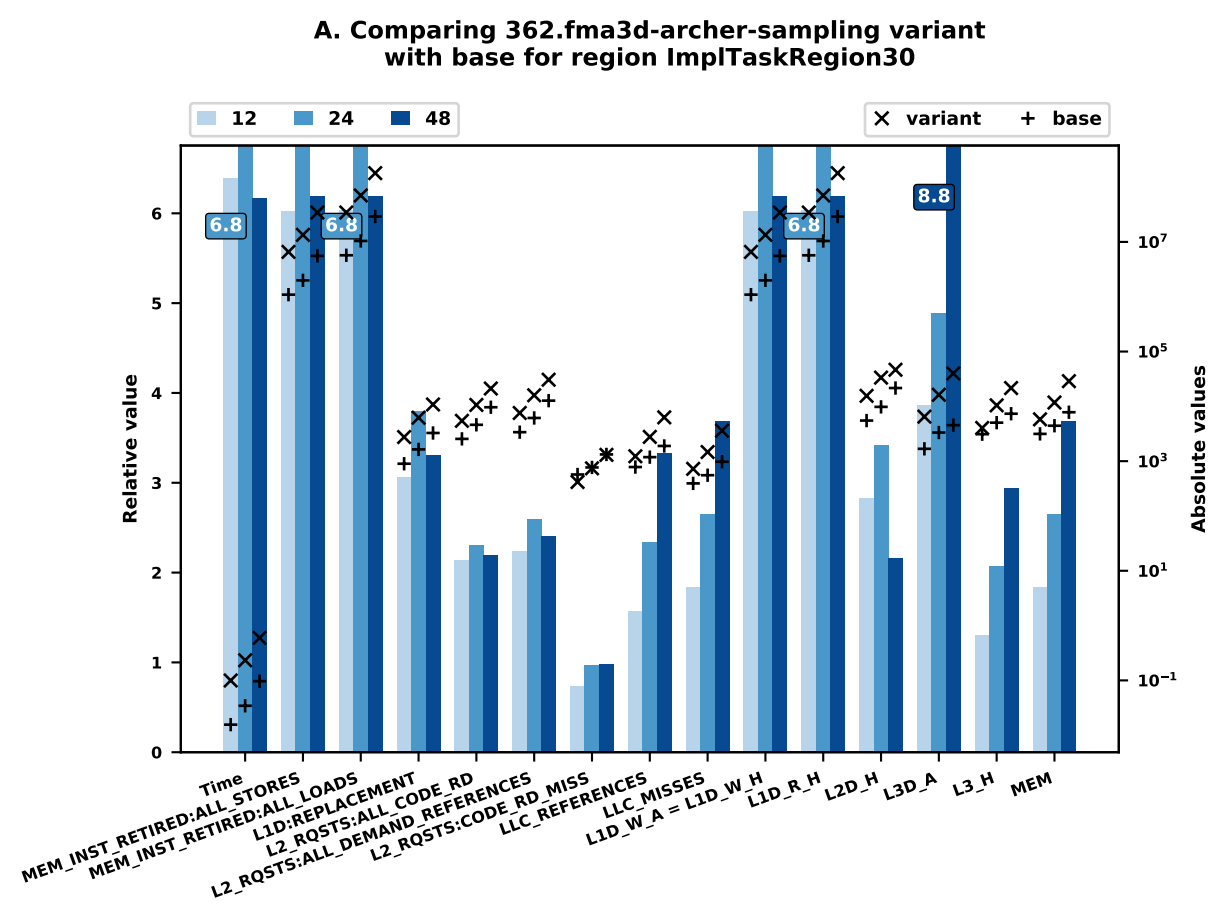

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion29
12
24
48
variant
base
Relative value
Absolute values
1.3
1.1
1.1
1.3
1.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

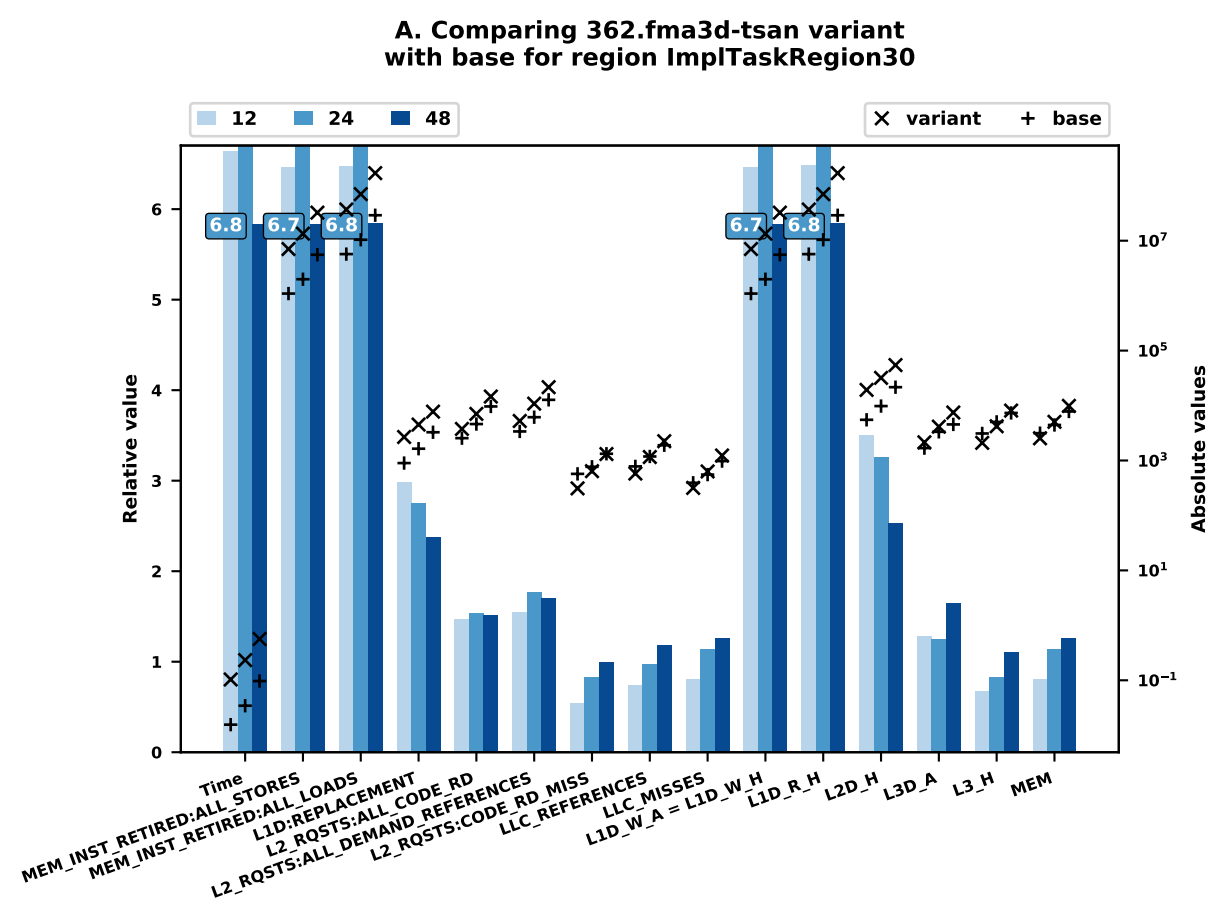

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion29
12
24
48
variant
base
Relative value
Absolute values
1.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

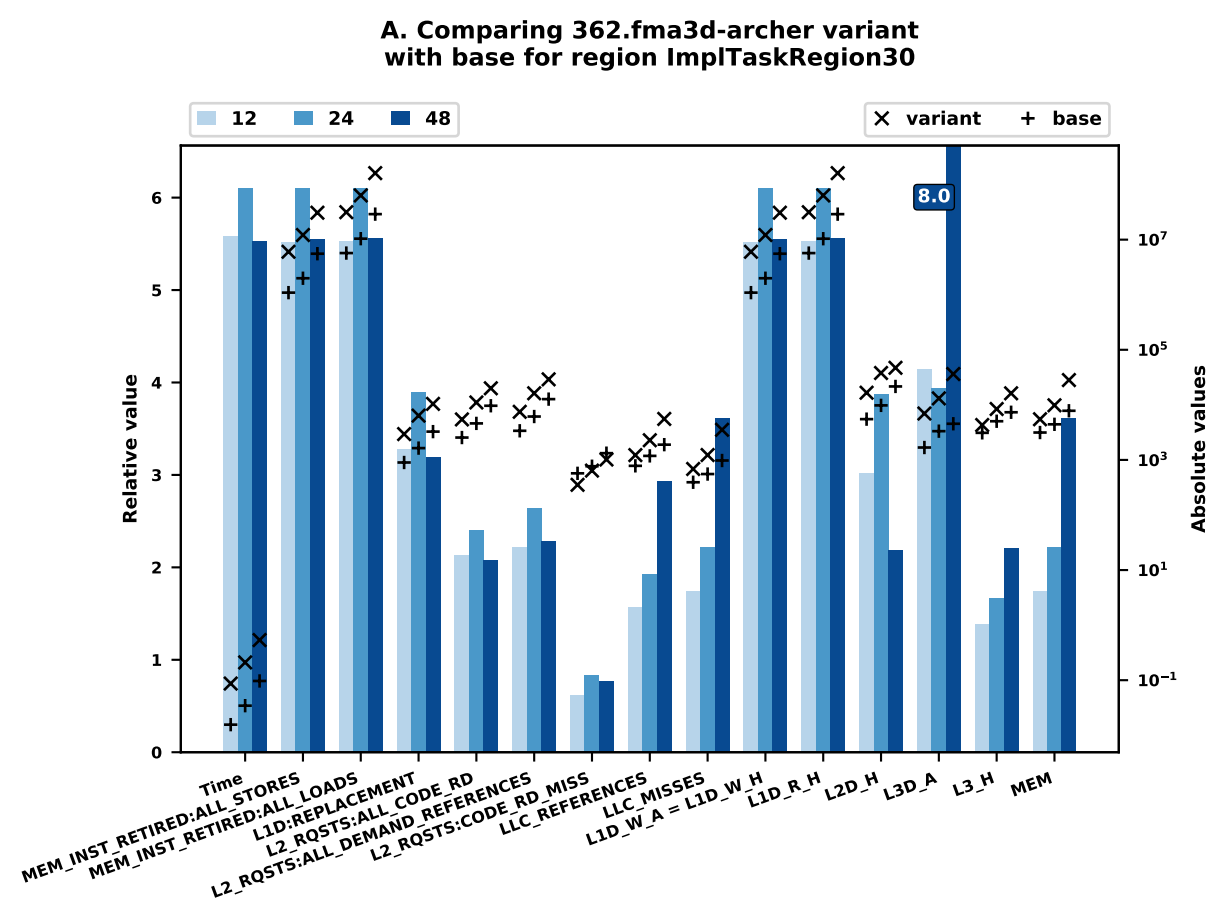

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion30
12
24
48
variant
base
6.9
6.9
6.9
6.9
6.9
Relative value
Absolute values
0
1
2
3
4
5
6
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

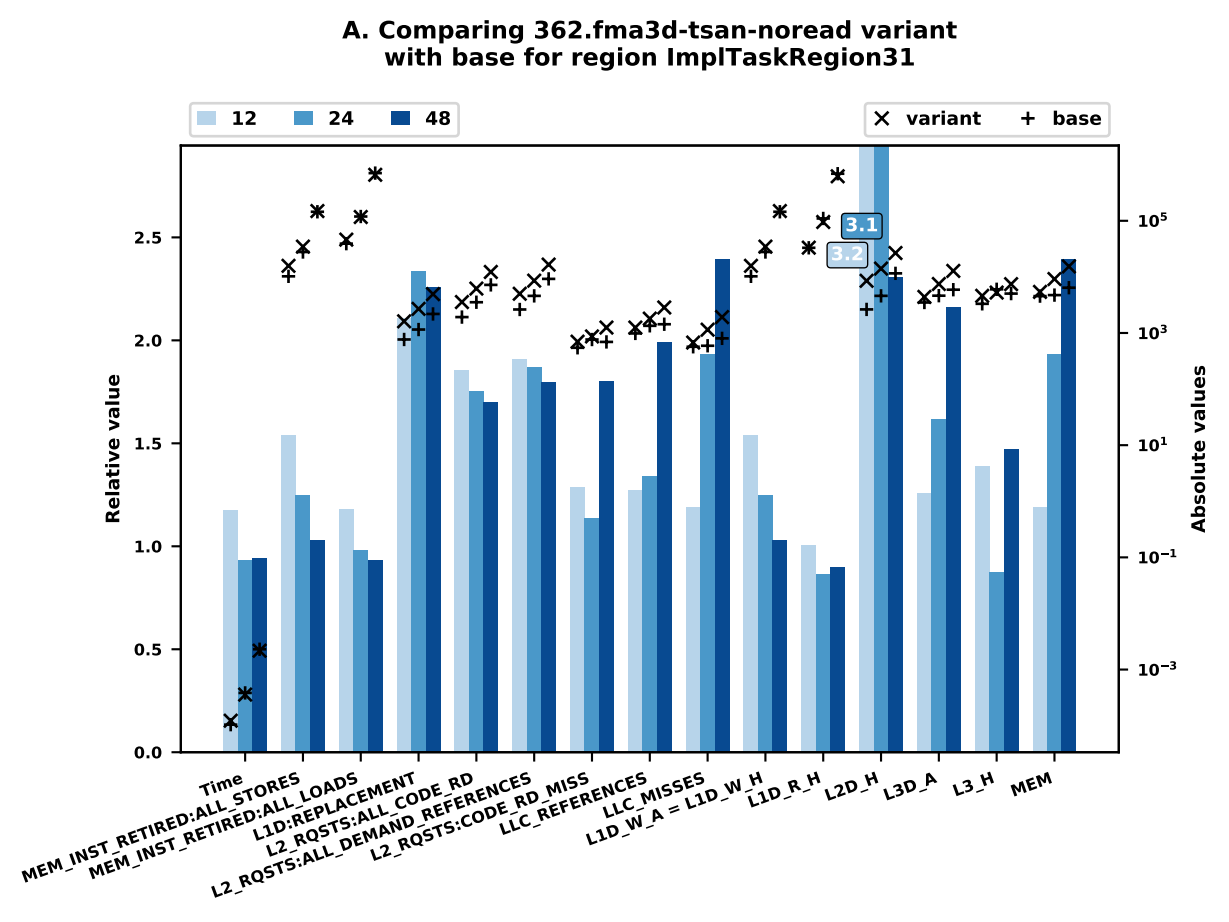

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion30
12
24
48
variant
base
6.3
6.3
6.3
7.3
Relative value
Absolute values
0
1
2
3
4
5
6
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

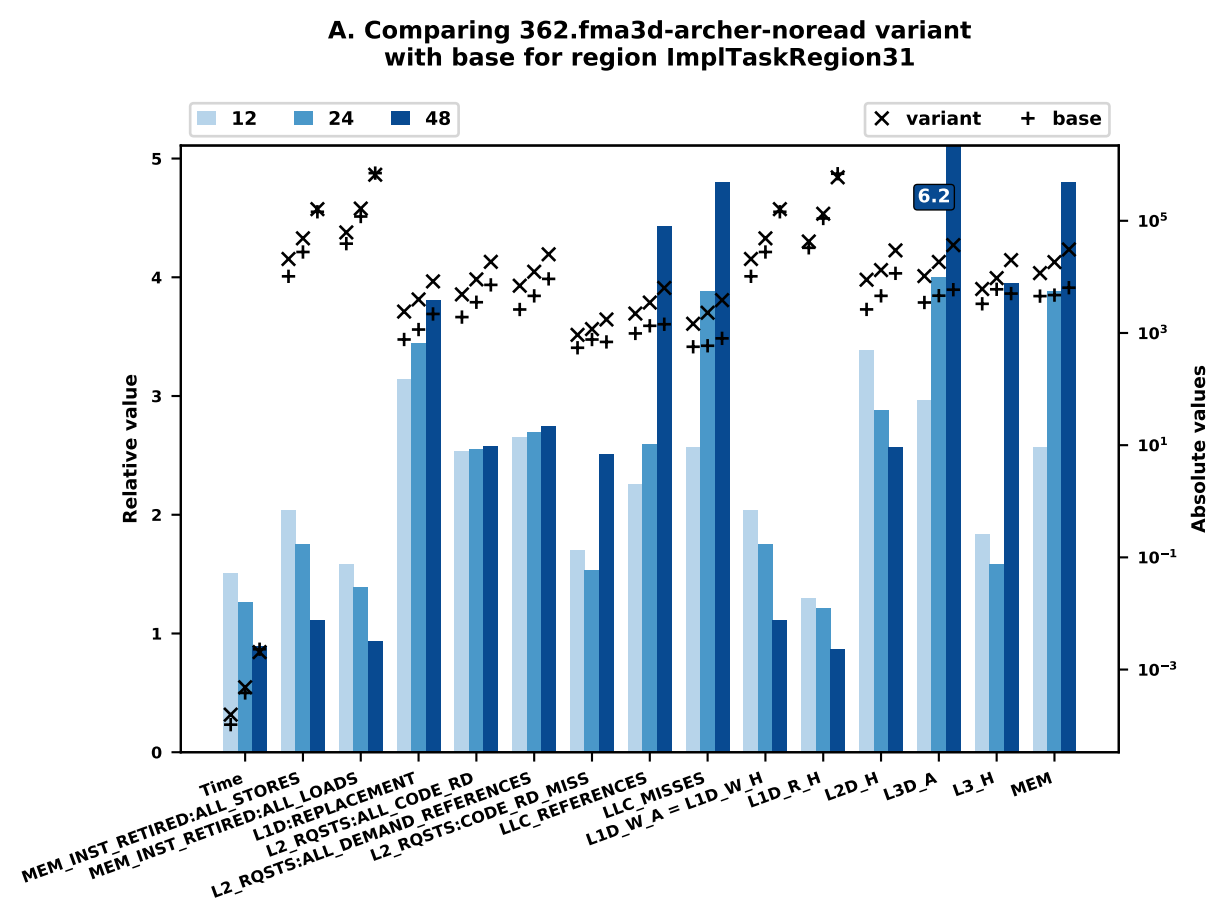

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion30
12
24
48
variant
base
Relative value
Absolute values
7.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

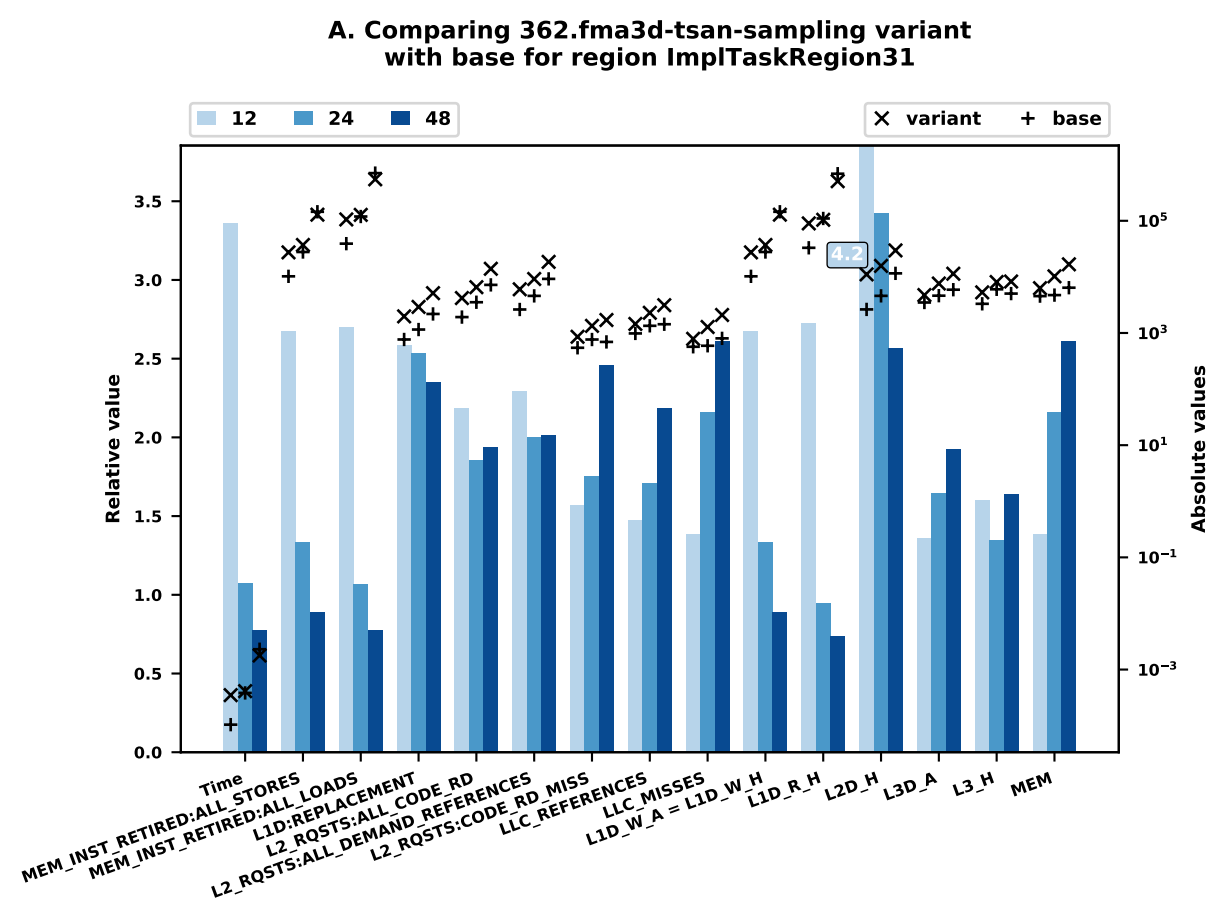

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion30
12
24
48
variant
base
6.8
6.8
6.8
8.8
Relative value
Absolute values
0
1
2
3
4
5
6
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

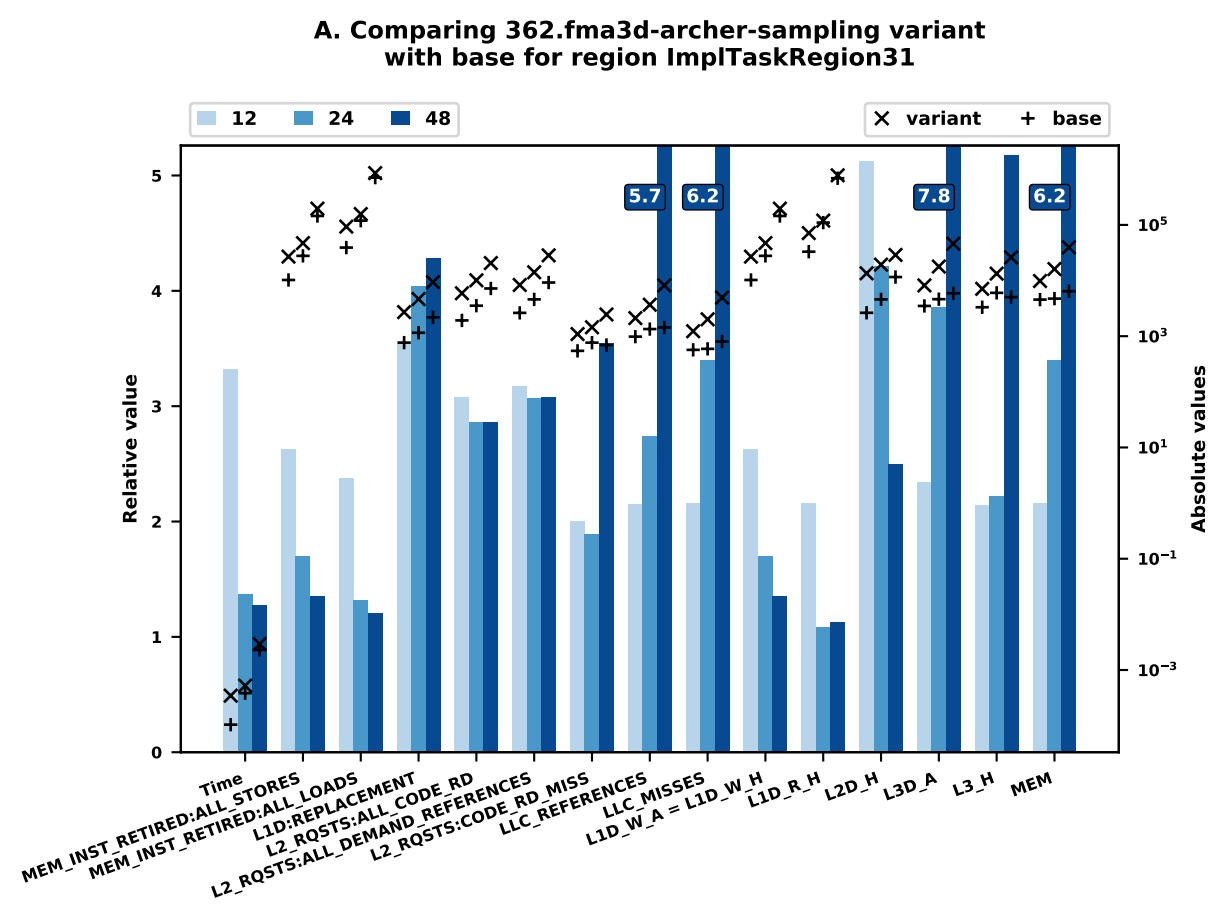

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion30
12
24
48
variant
base
6.8
6.7
6.8
6.7
6.8
Relative value
Absolute values
0
1
2
3
4
5
6
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

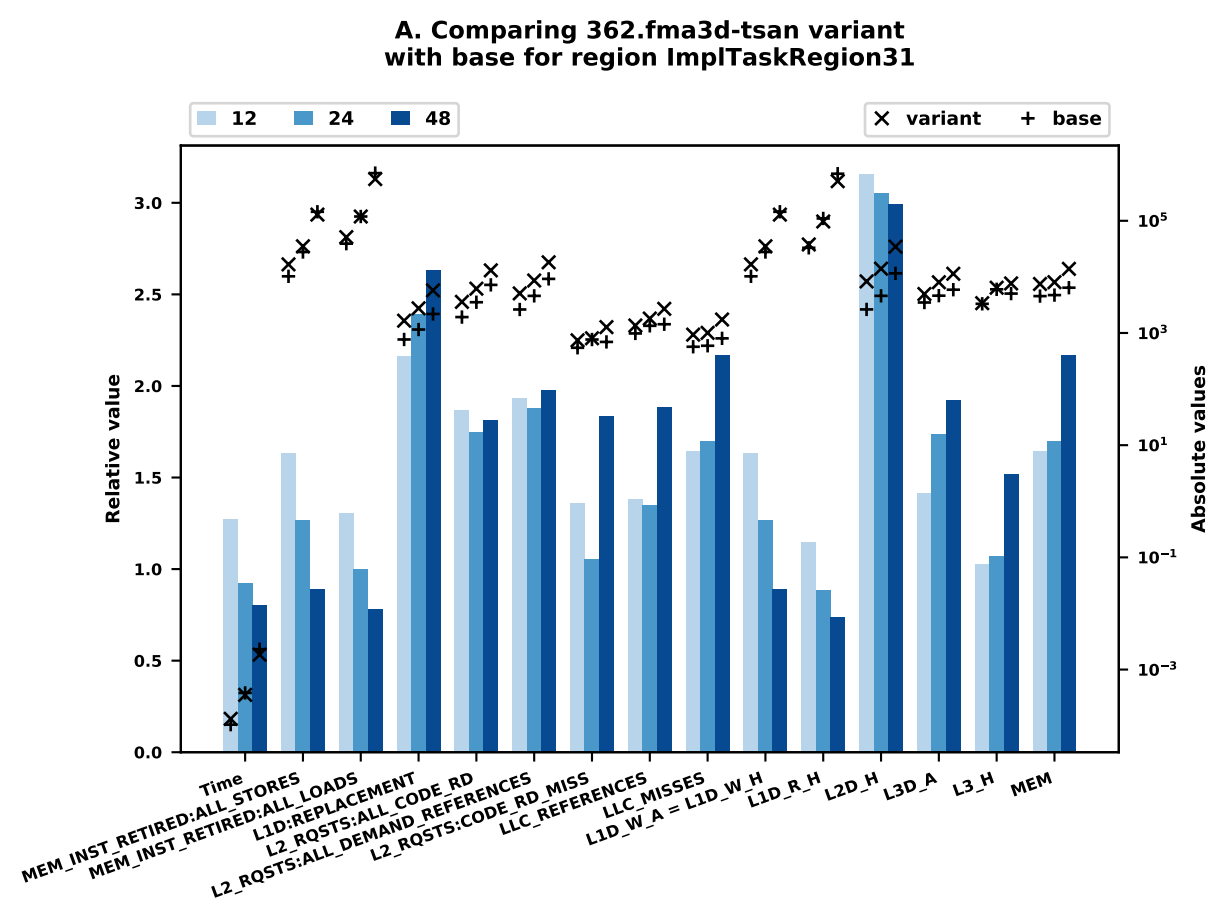

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion30
12
24
48
variant
base
8.0
Relative value
Absolute values
0
1
2
3
4
5
6
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

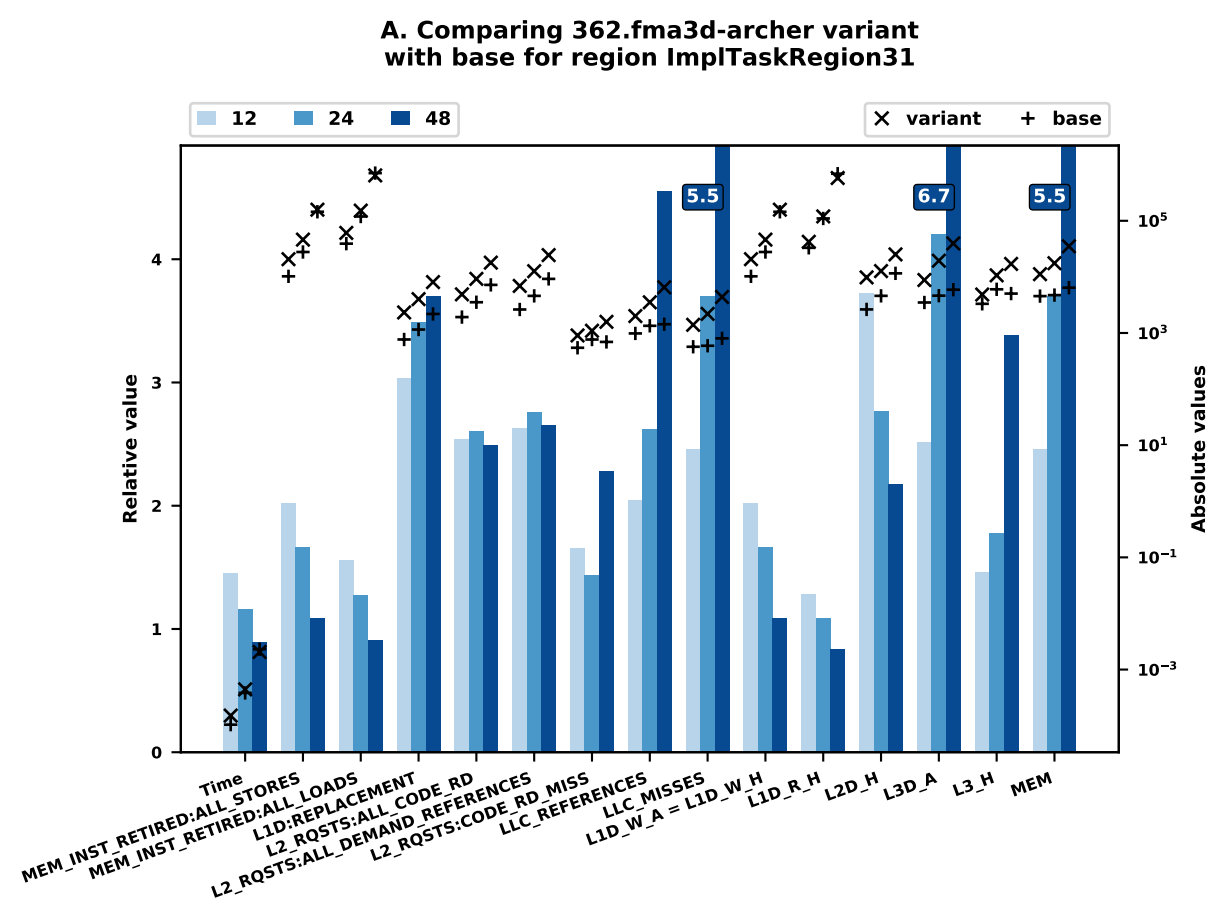

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion31
12
24
48
variant
base
3.1
3.2
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

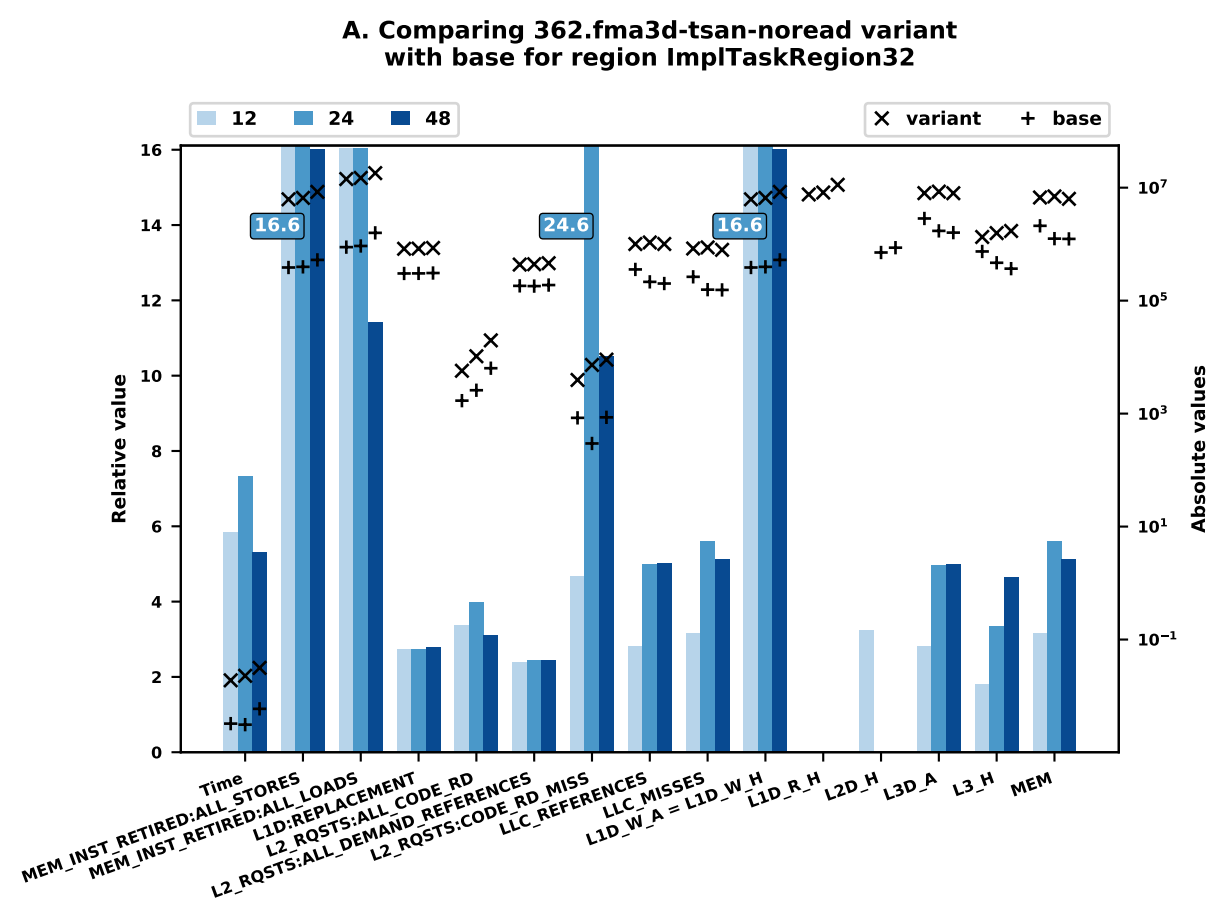

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion31
12
24
48
variant
base
6.2
Relative value
Absolute values
0
1
2
3
4
5
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

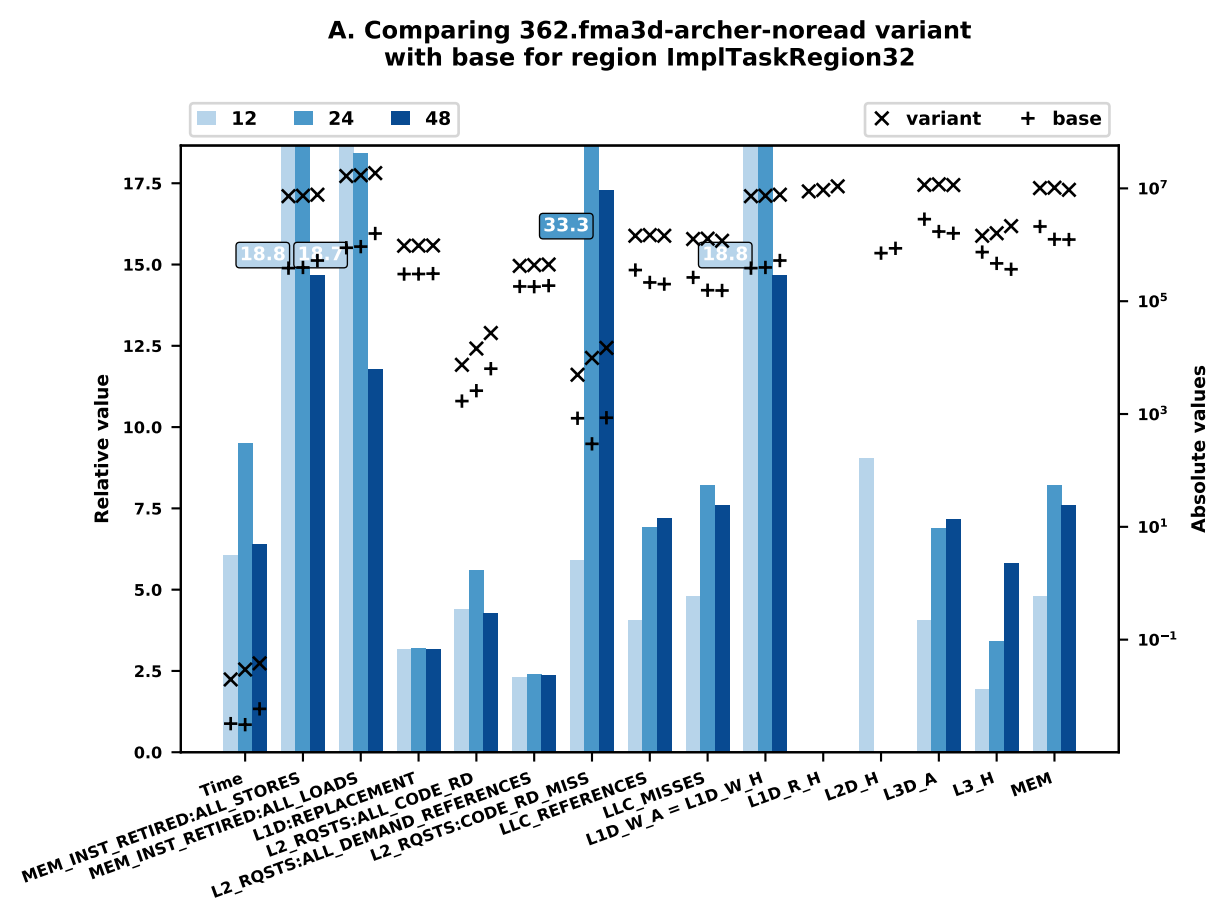

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion31
12
24
48
variant
base
Relative value
Absolute values
4.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

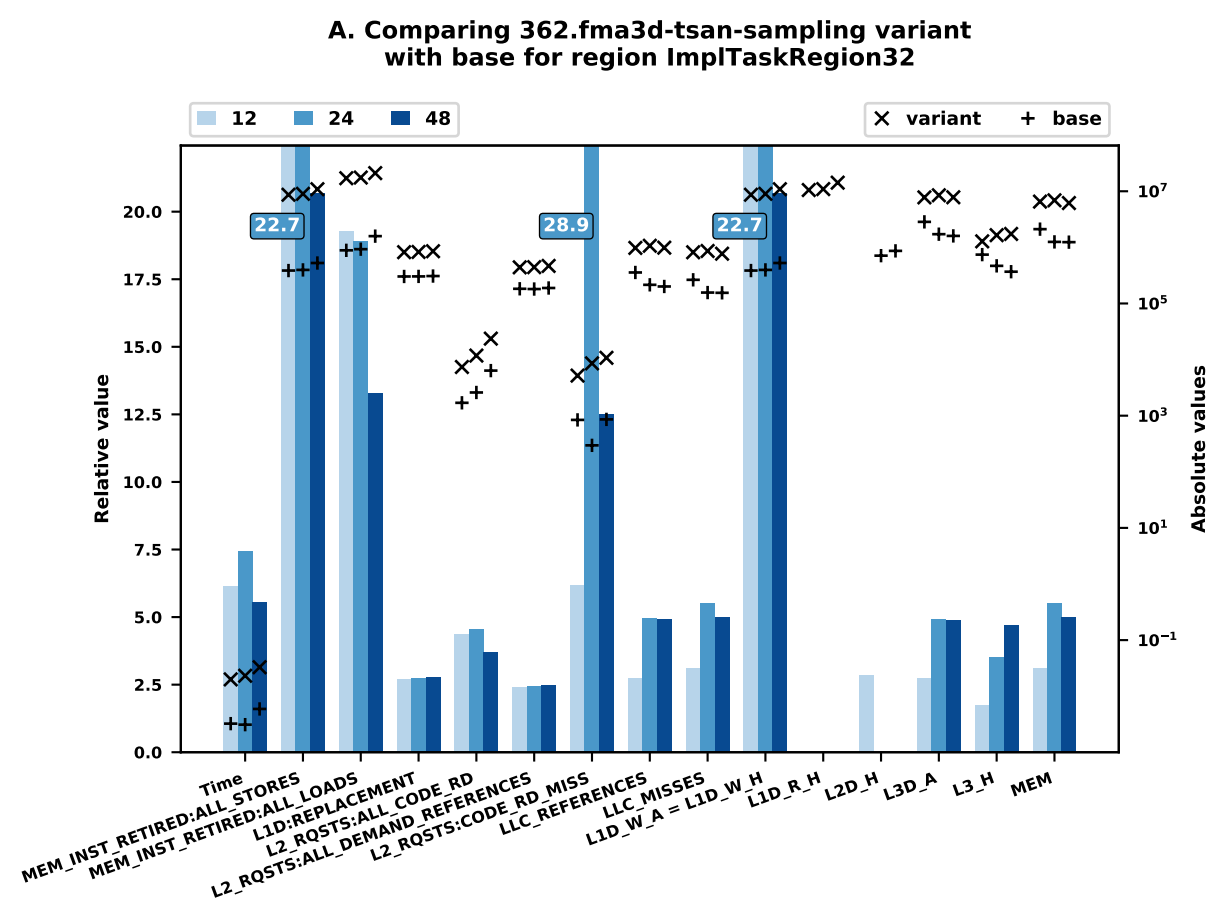

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion31
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
5.7
6.2
7.8
6.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

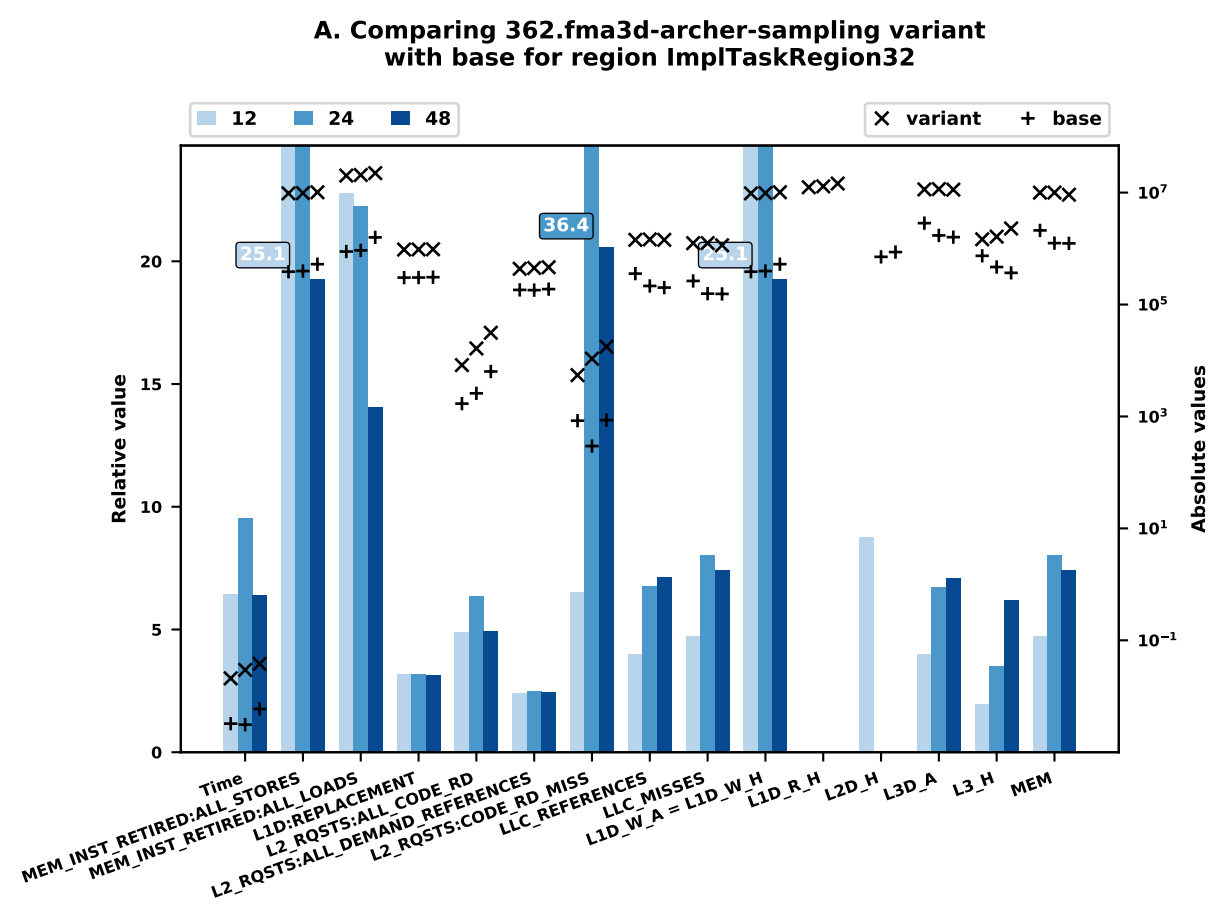

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion31
12
24
48
variant
base
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

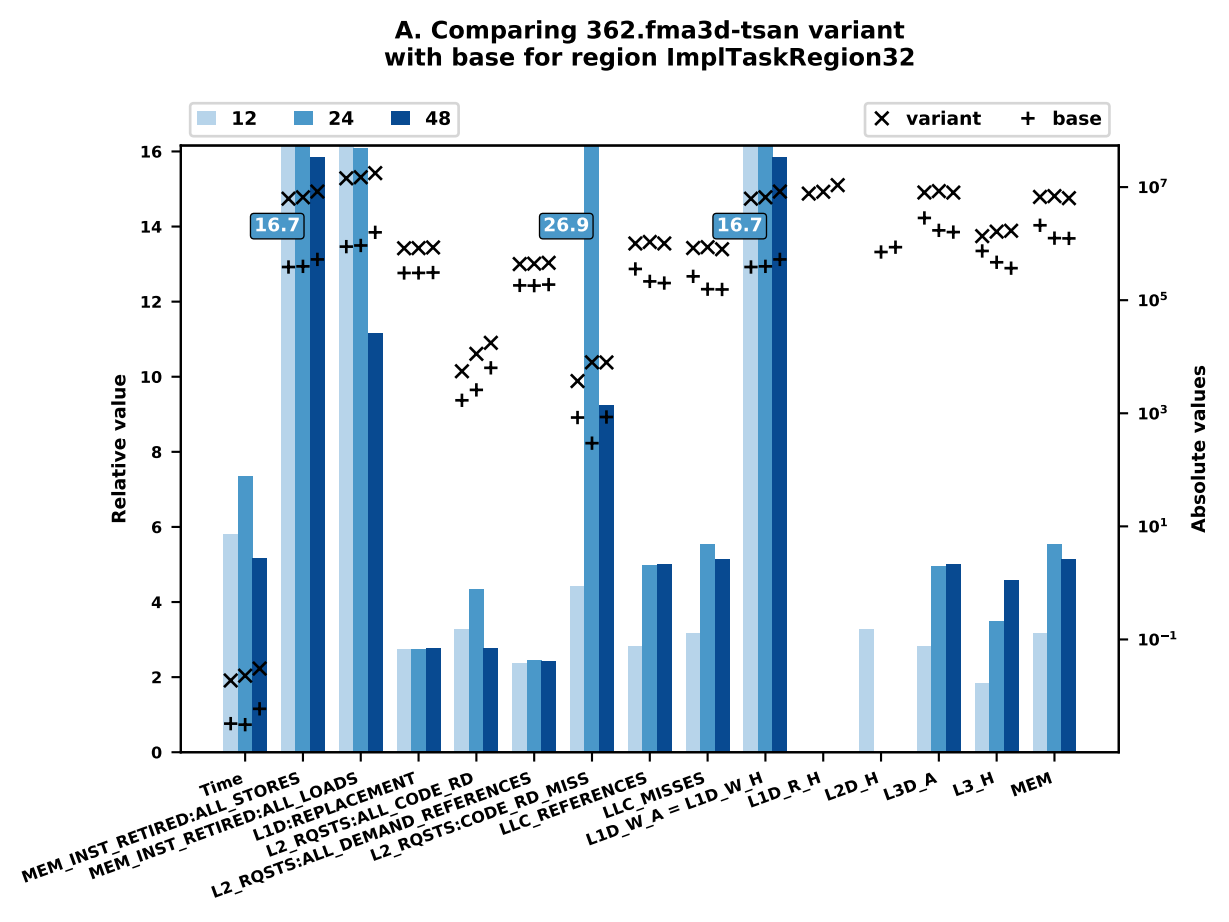

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion31
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
5.5
6.7
5.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

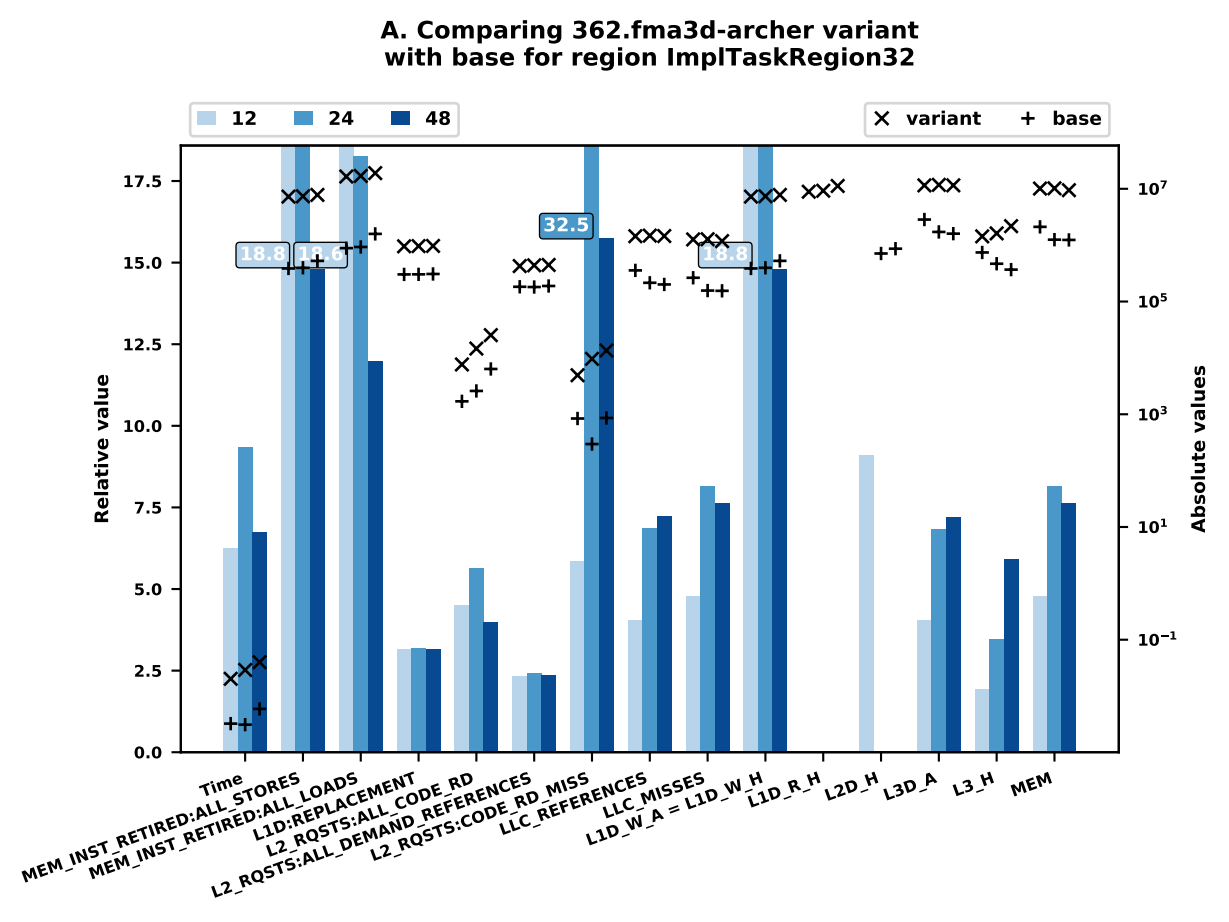

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion32
12
24
48
variant
base
Relative value
Absolute values
16.6
24.6
16.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

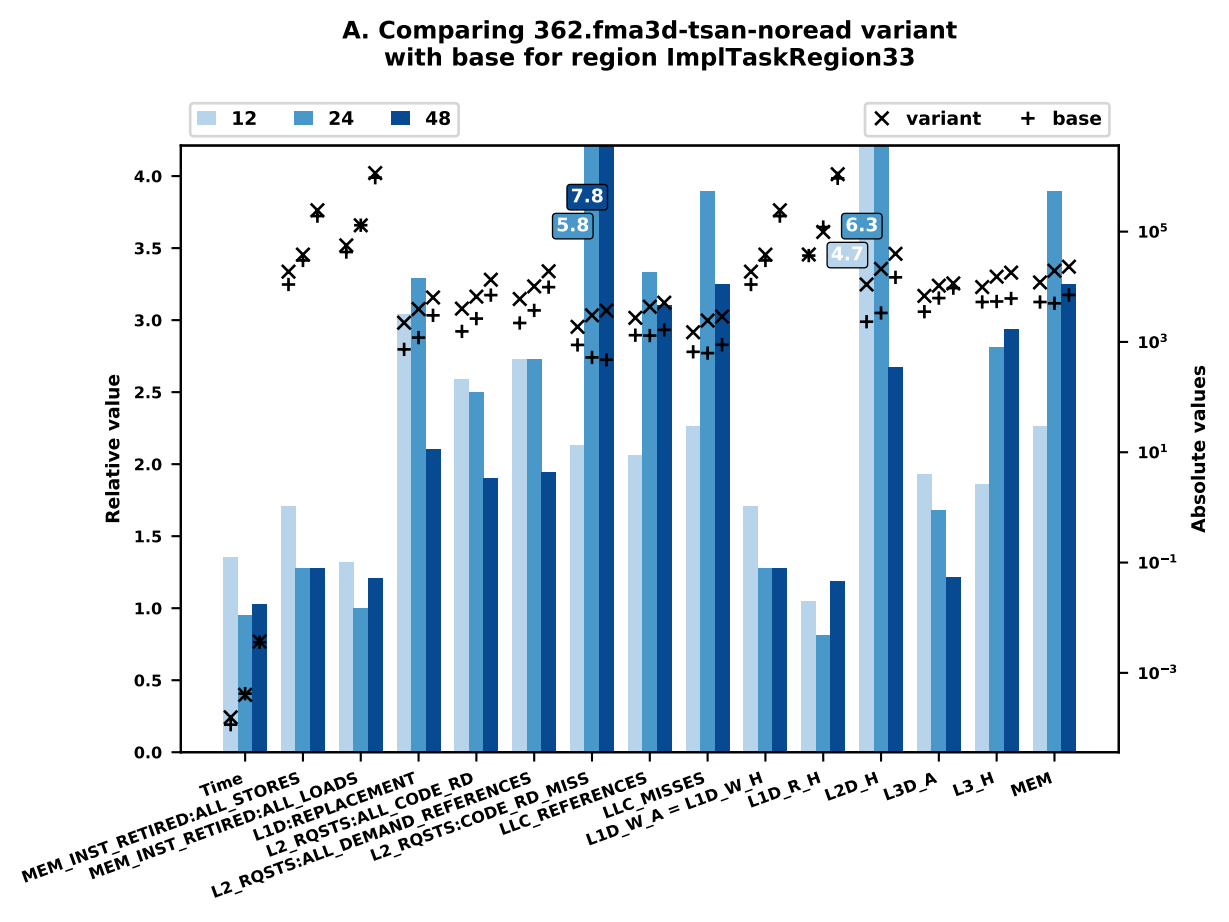

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion32
12
24
48
variant
base
Relative value
Absolute values
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
18.8
18.7
33.3
18.8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

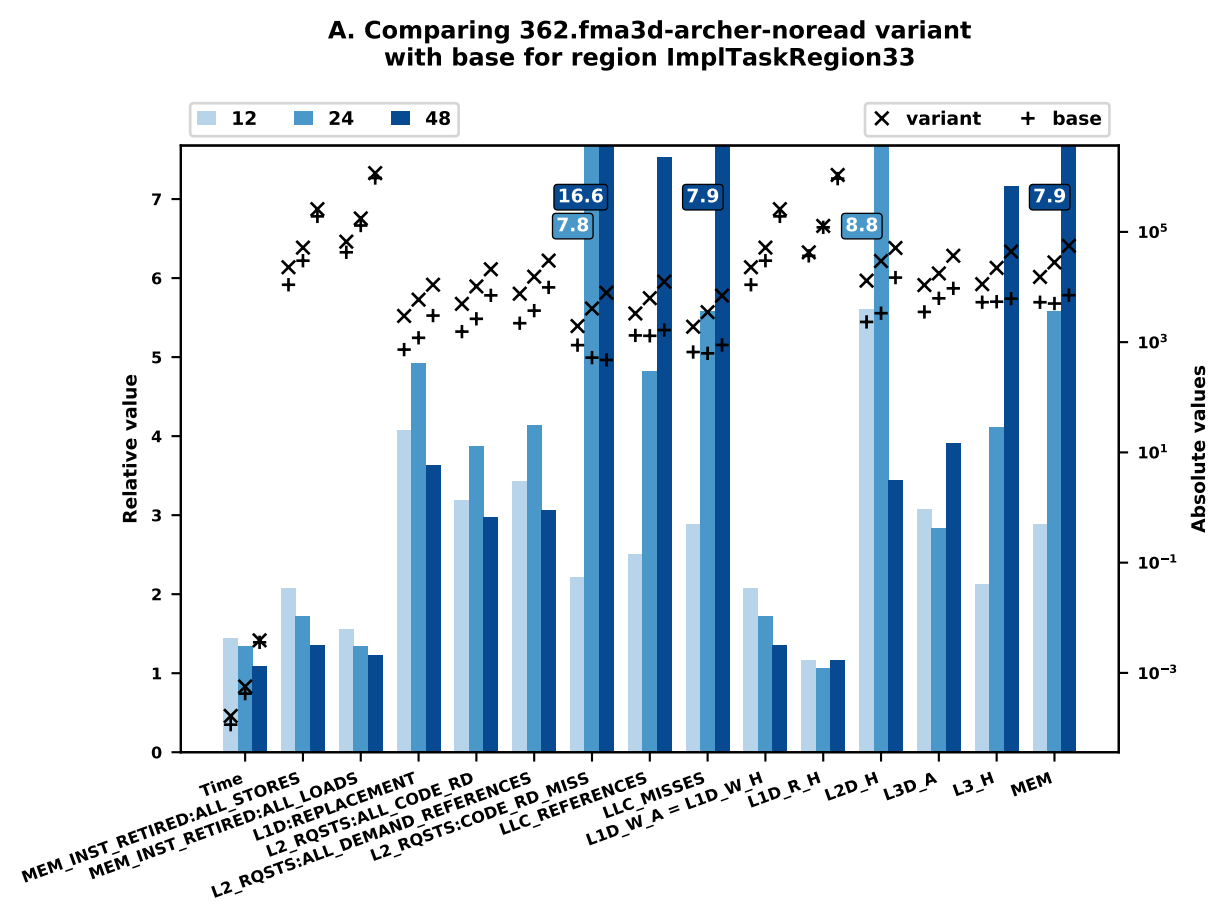

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion32
12
24
48
variant
base
22.7
28.9
22.7
Relative value
Absolute values
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

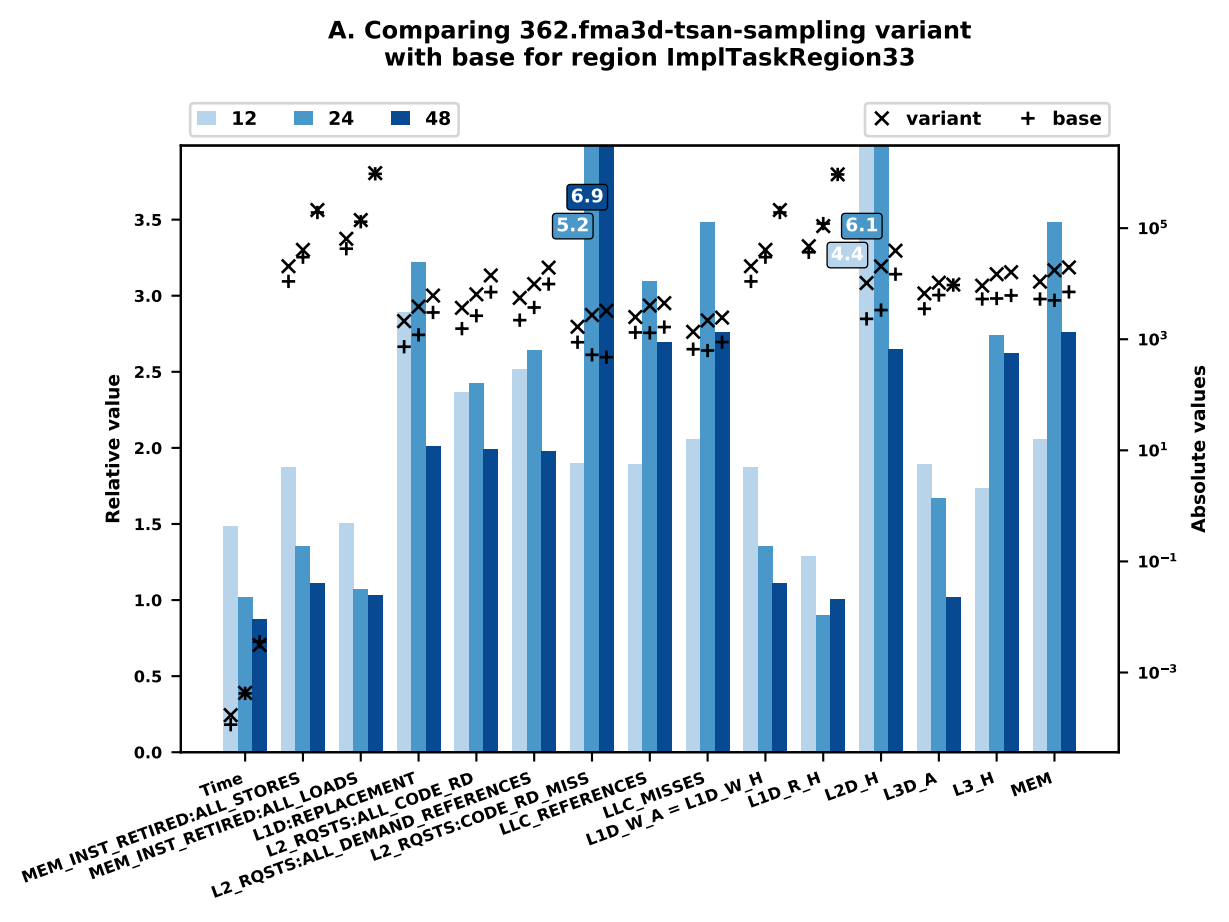

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion32
12
24
48
variant
base
Relative value
Absolute values
25.1
36.4
25.1
0
5
10
15
20
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

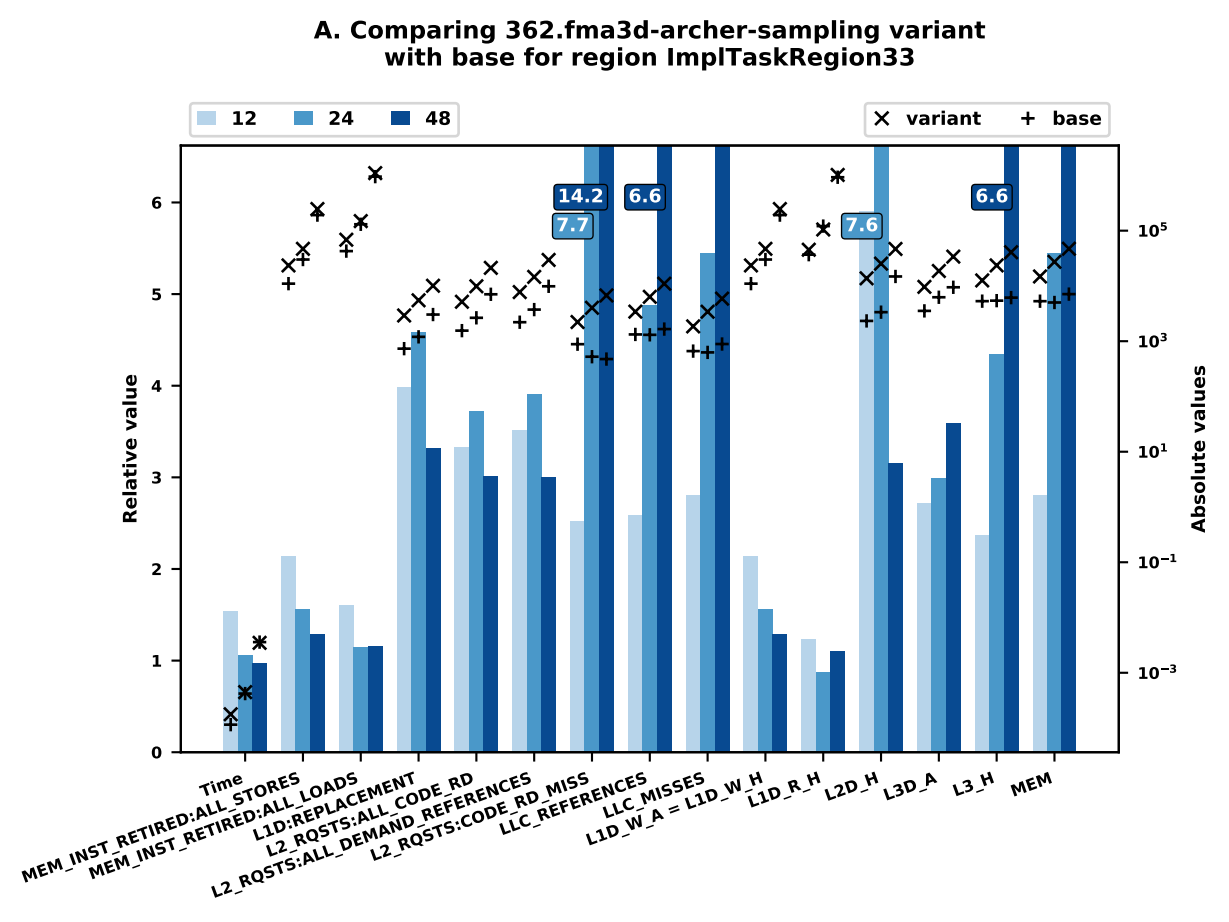

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion32
12
24
48
variant
base
Relative value
Absolute values
16.7
26.9
16.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

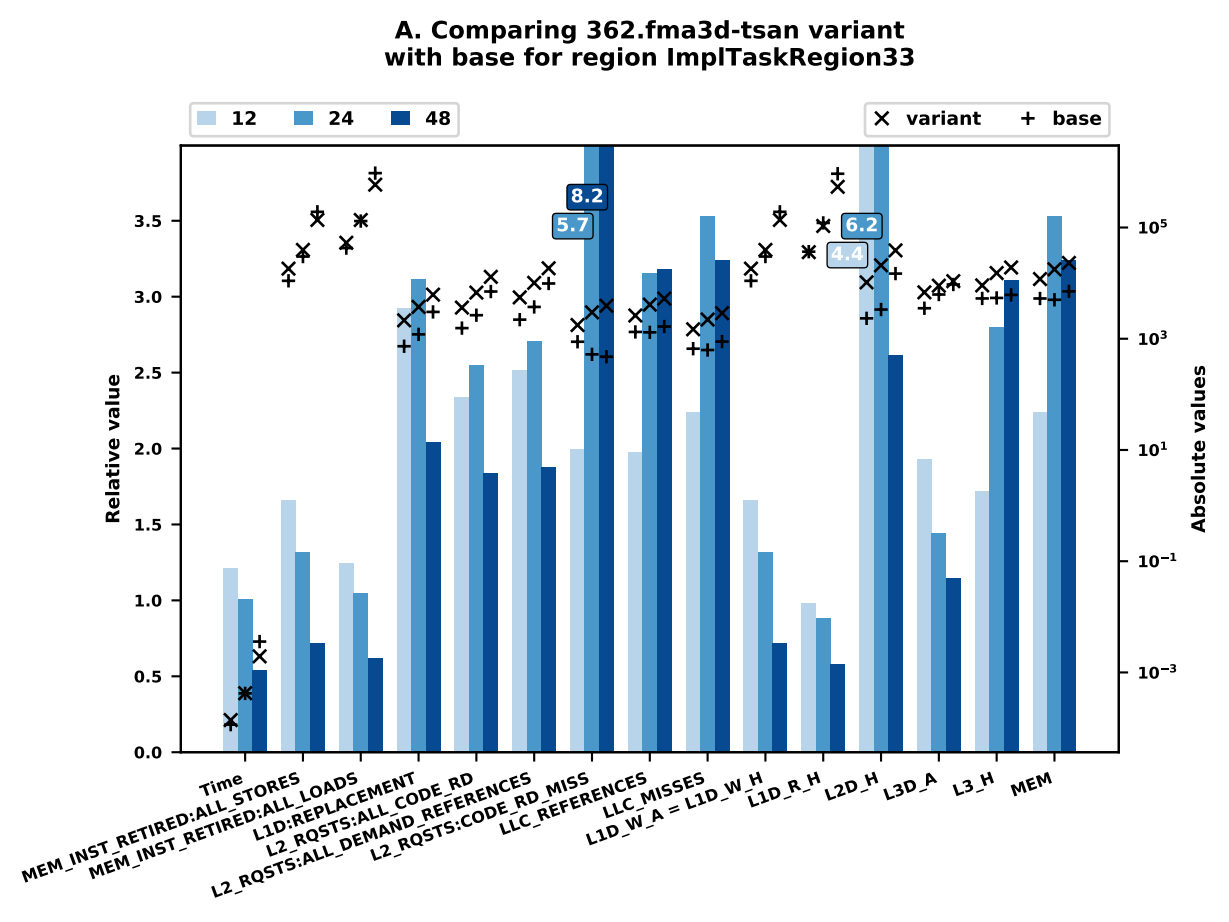

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion32
12
24
48
variant
base
Relative value
Absolute values
17.5
15.0
12.5
10.0
7.5
5.0
2.5
0.0
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
18.8
18.6
32.5
18.8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

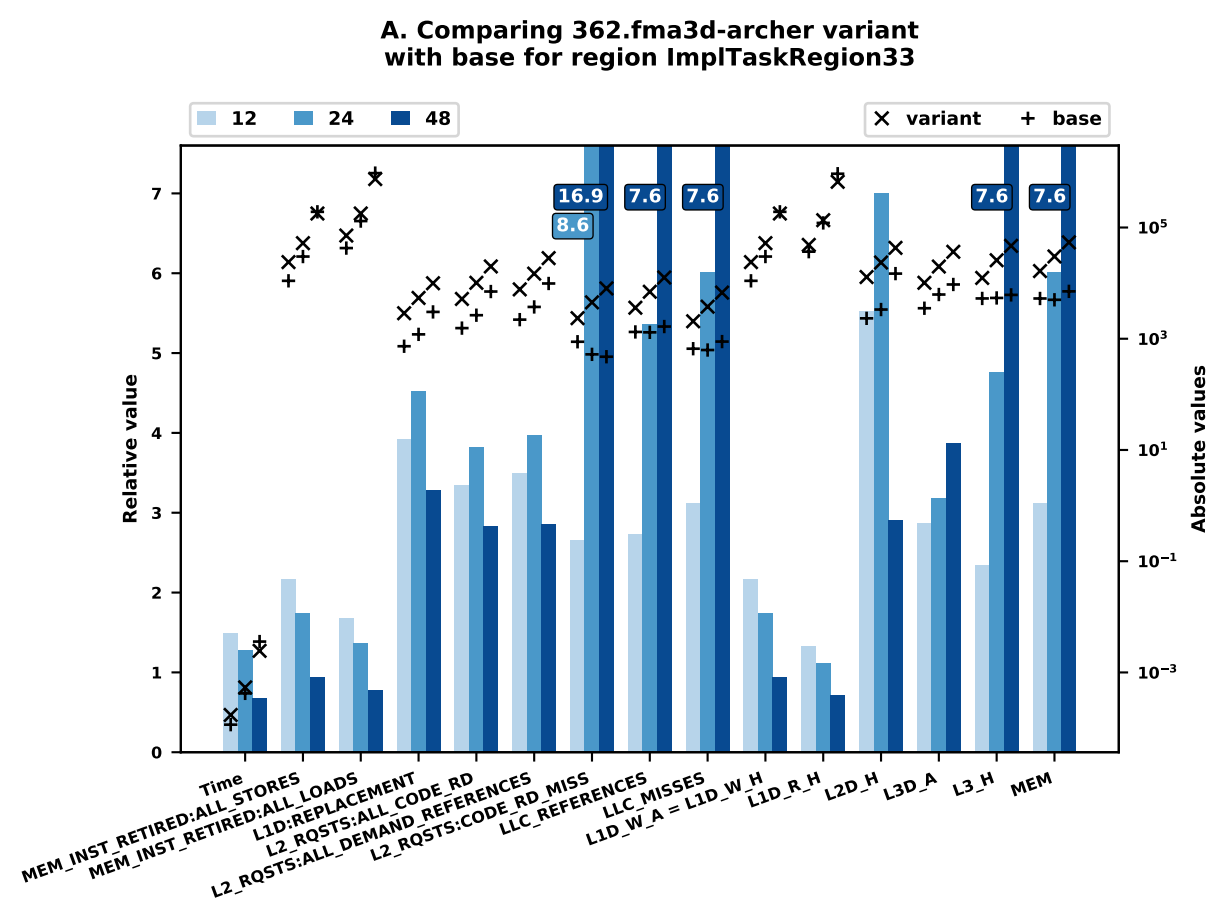

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion33
12
24
48
variant
base
Relative value
Absolute values
7.8
5.8
6.3
4.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

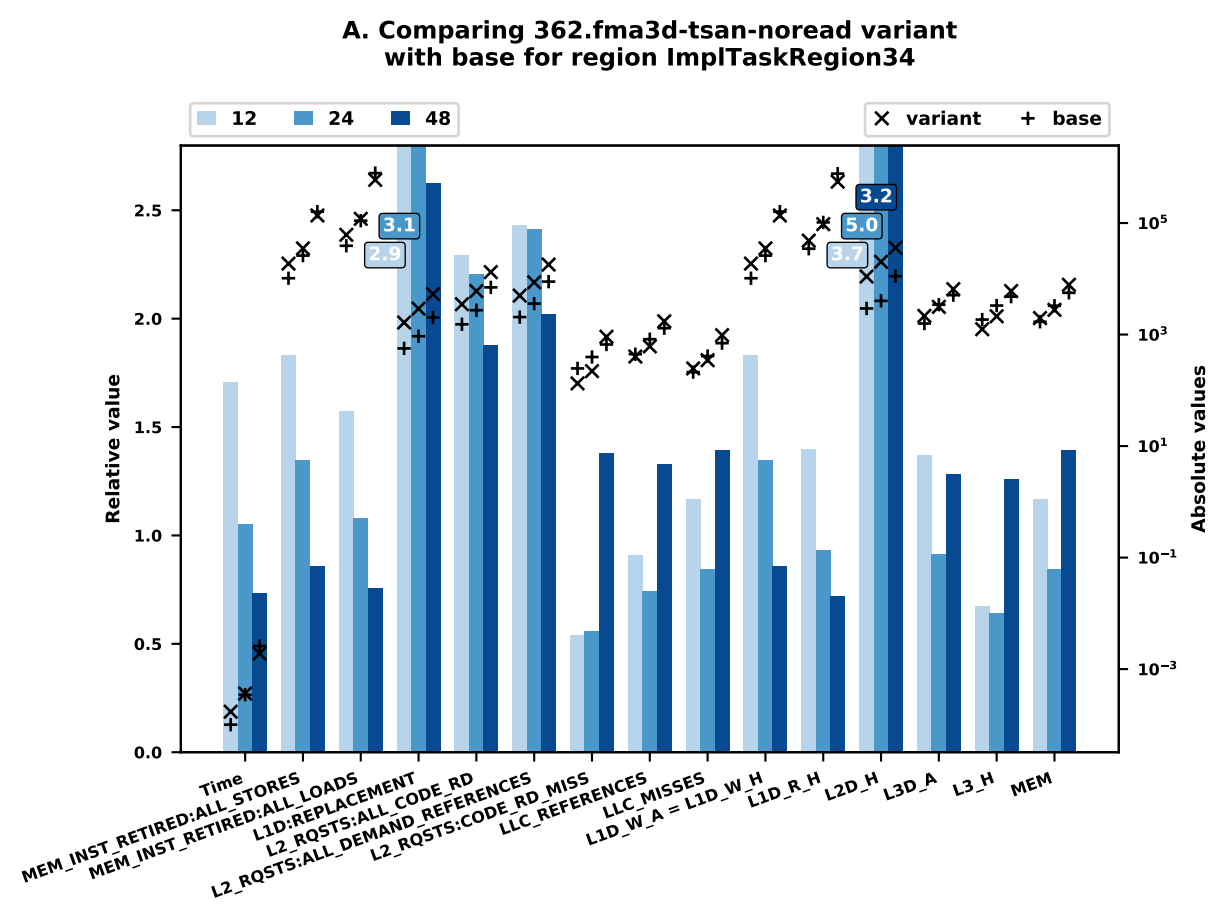

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion33
12
24
48
variant
base
Relative value
Absolute values
16.6
7.8
7.9
8.8
7.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

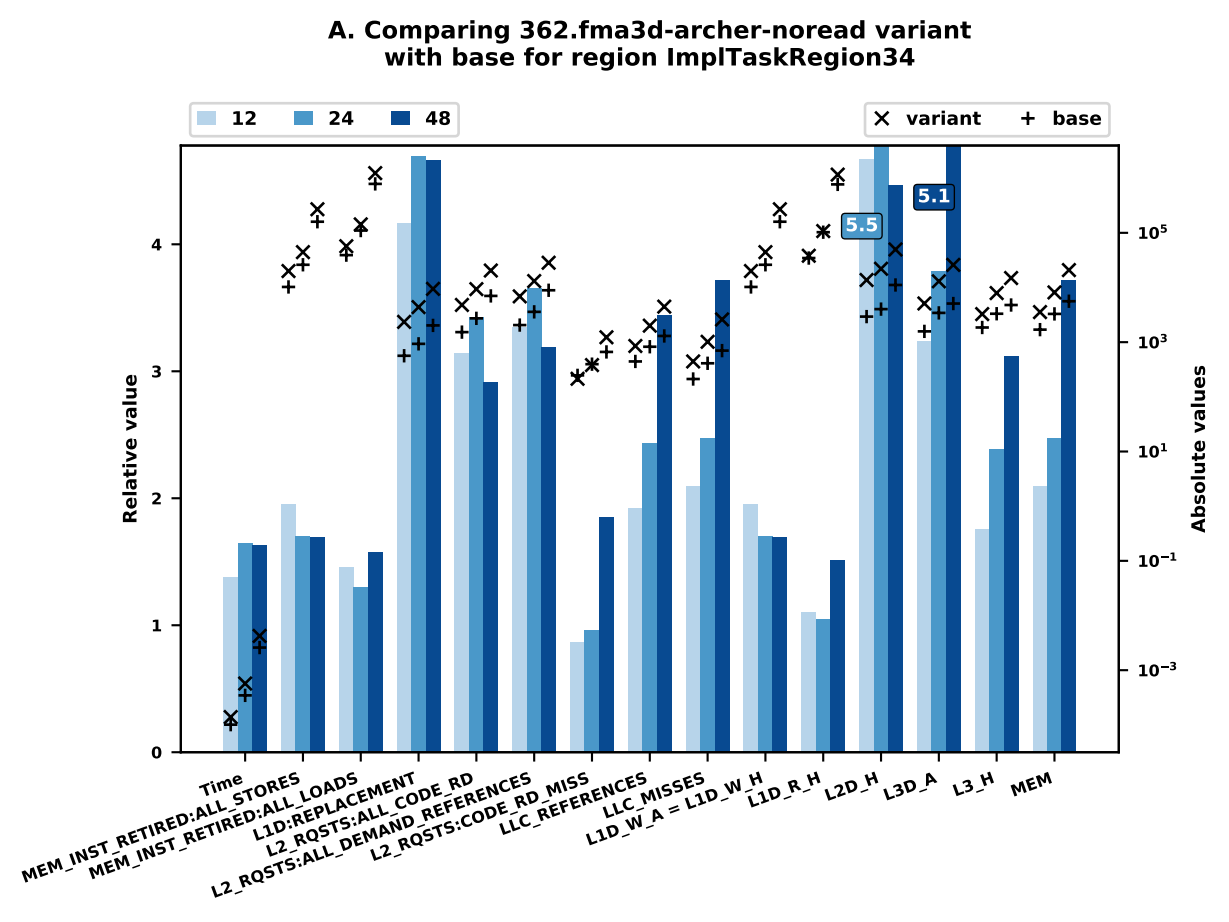

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion33
12
24
48
variant
base
6.9
5.2
6.1
4.4
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

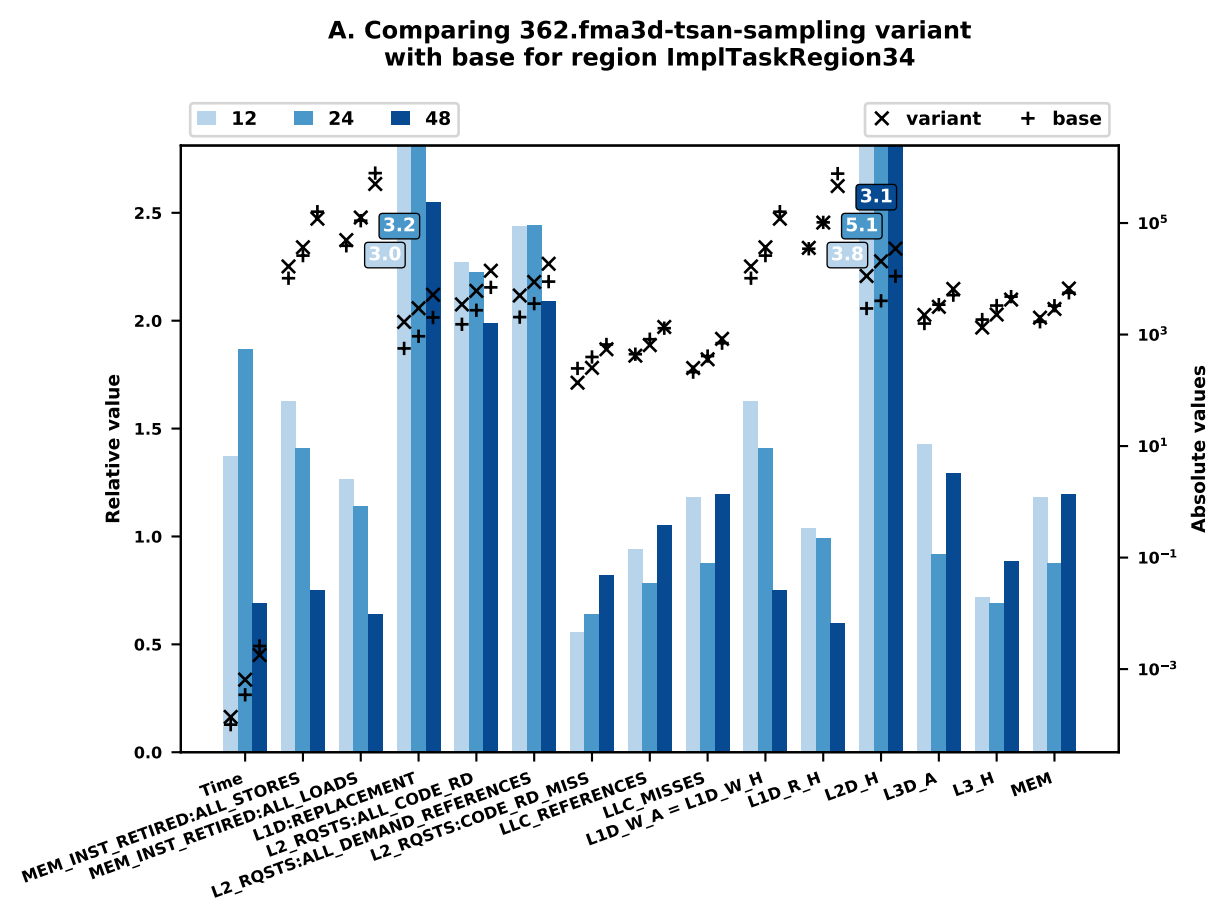

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion33
12
24
48
variant
base
Relative value
Absolute values
14.2
7.7
6.6
7.6
6.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

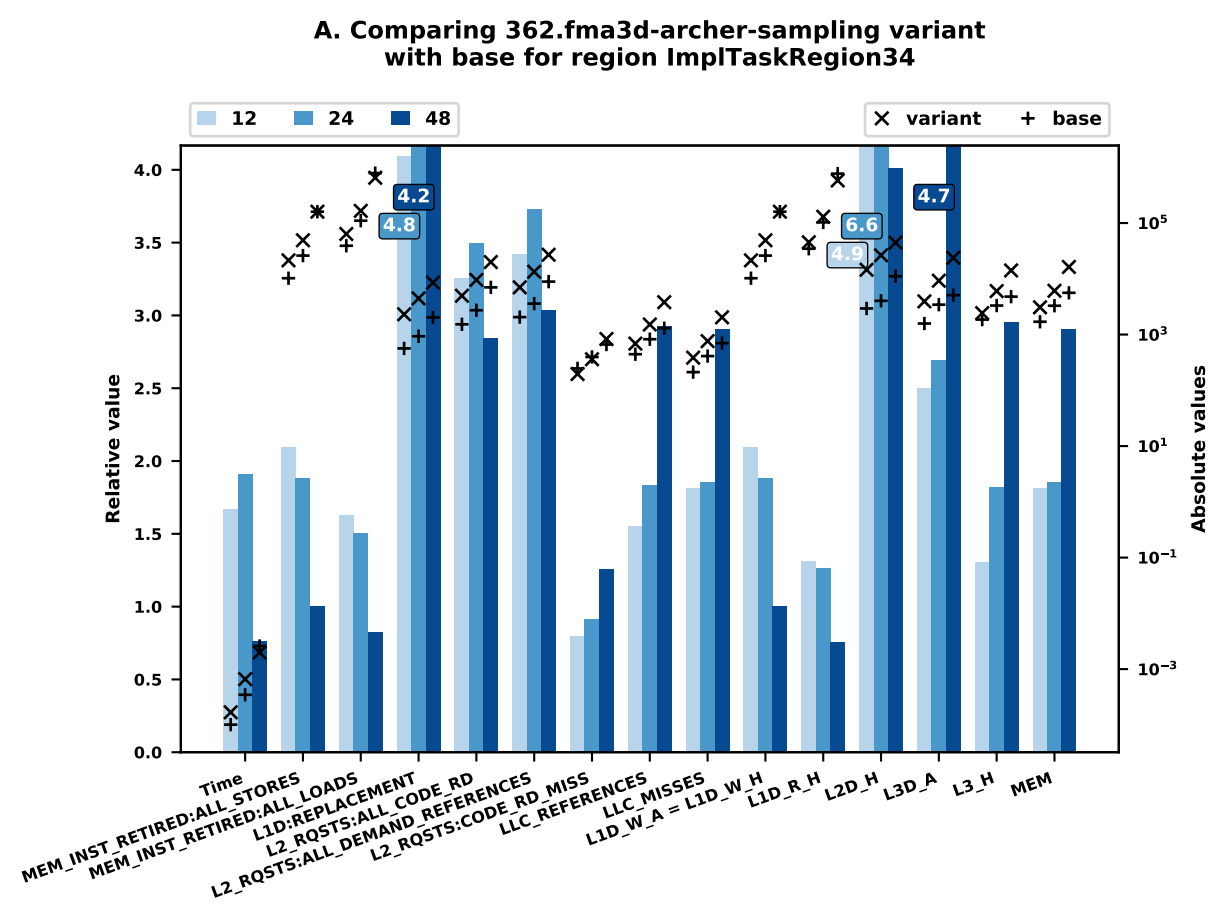

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion33
12
24
48
variant
base
8.2
5.7
6.2
4.4
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

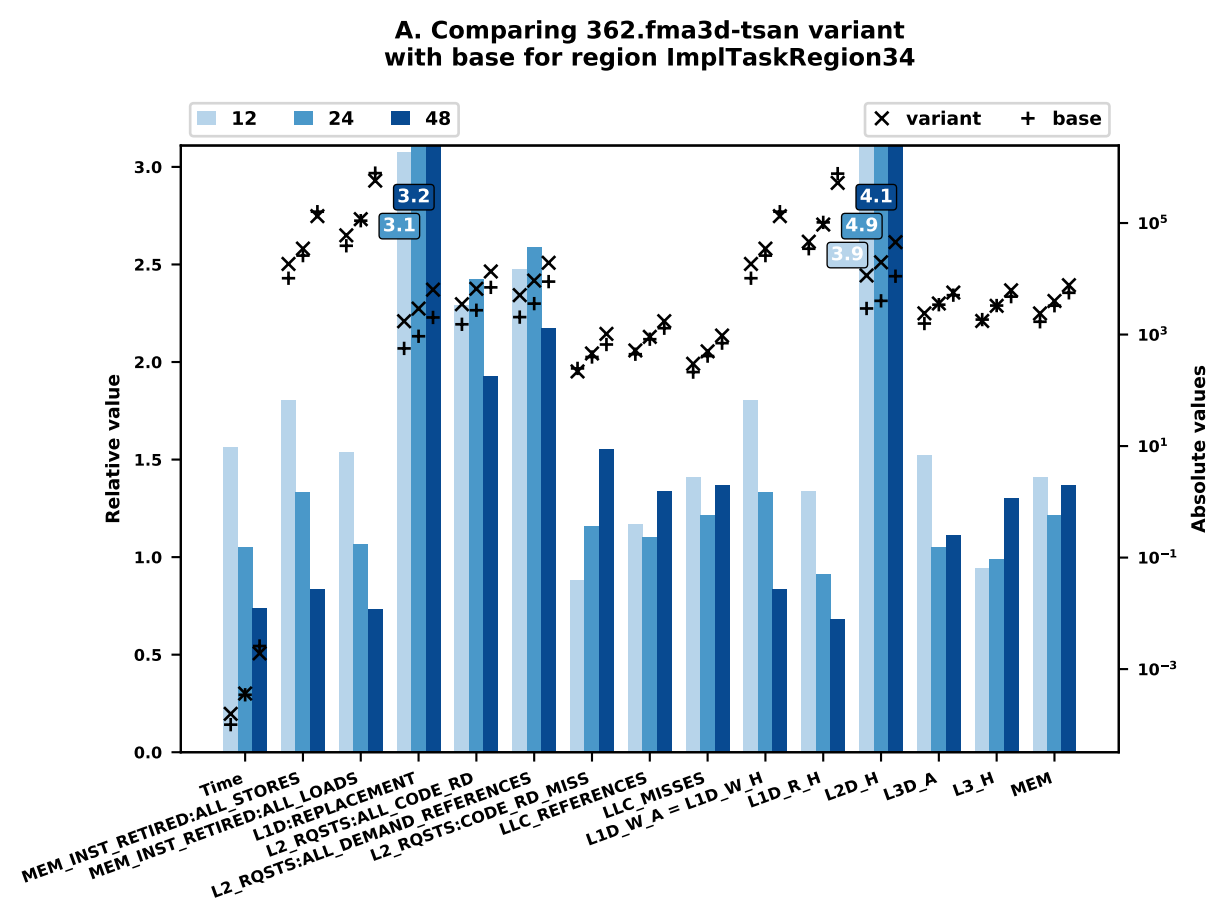

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion33
12
24
48
variant
base
Relative value
Absolute values
16.9
8.6
7.6
7.6
7.6
7.6
7.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

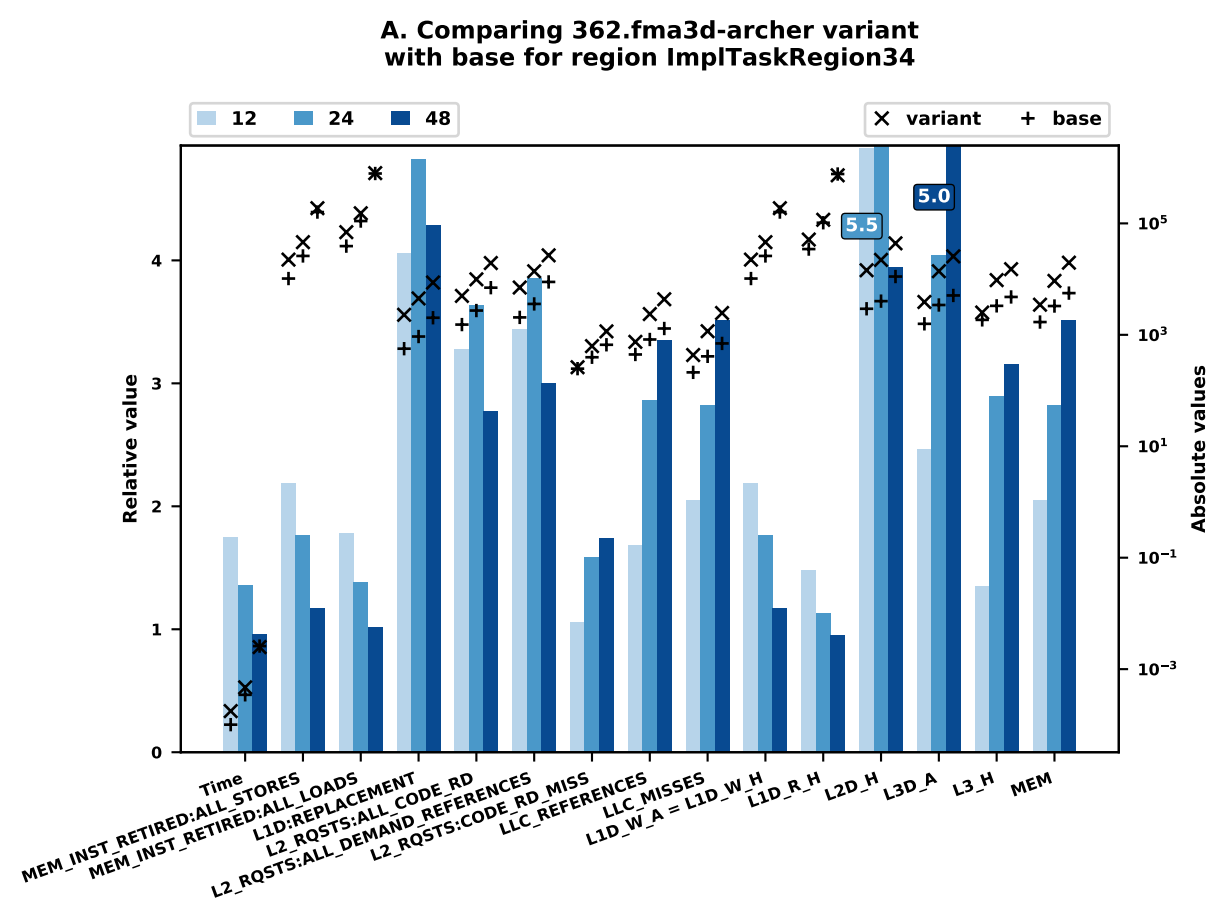

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion34
12
24
48
variant
base
Relative value
Absolute values
3.1
2.9
3.2
5.0
3.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

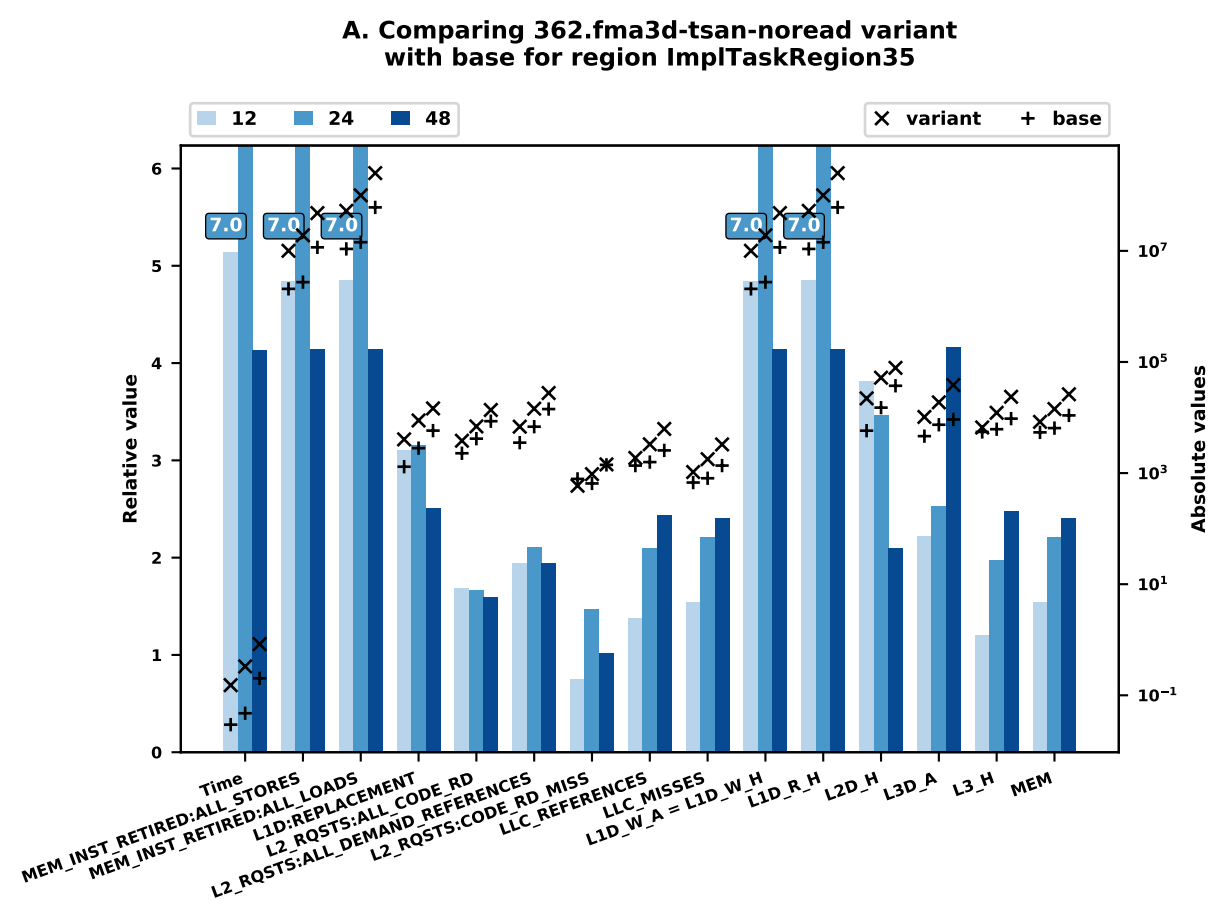

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion34
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
5.5
5.1
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

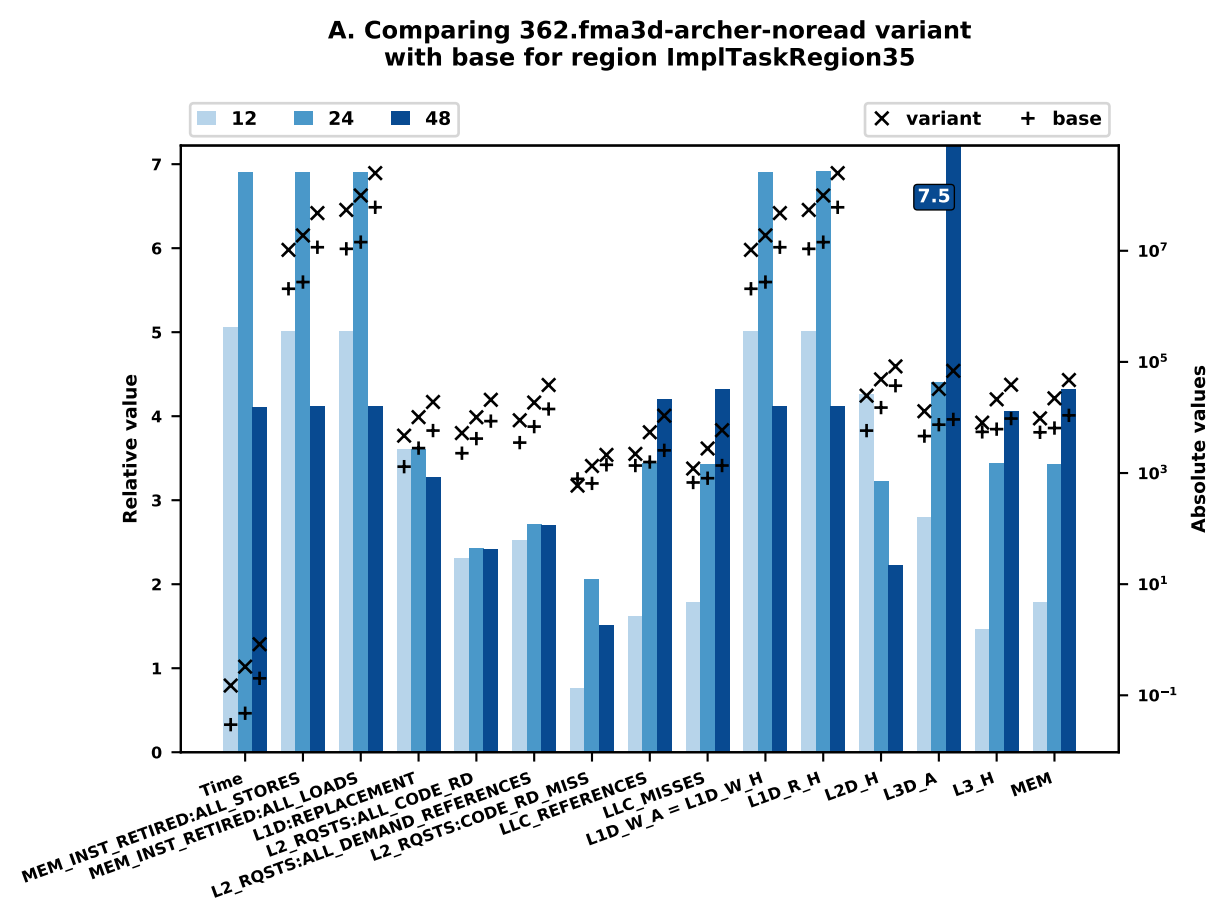

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion34
12
24
48
variant
base
3.2
3.0
3.1
5.1
3.8
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

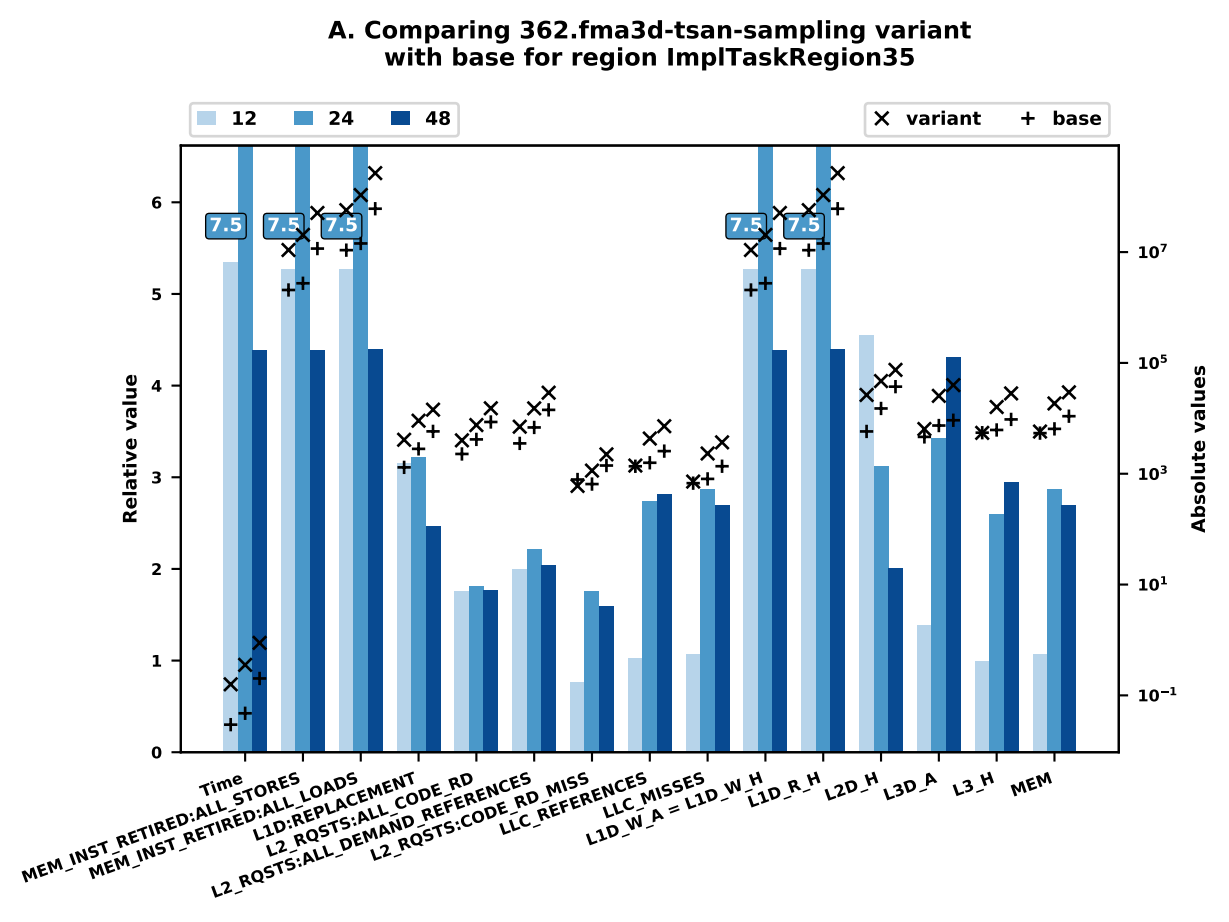

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion34
12
24
48
variant
base
4.2
4.8
6.6
4.3
4.7
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

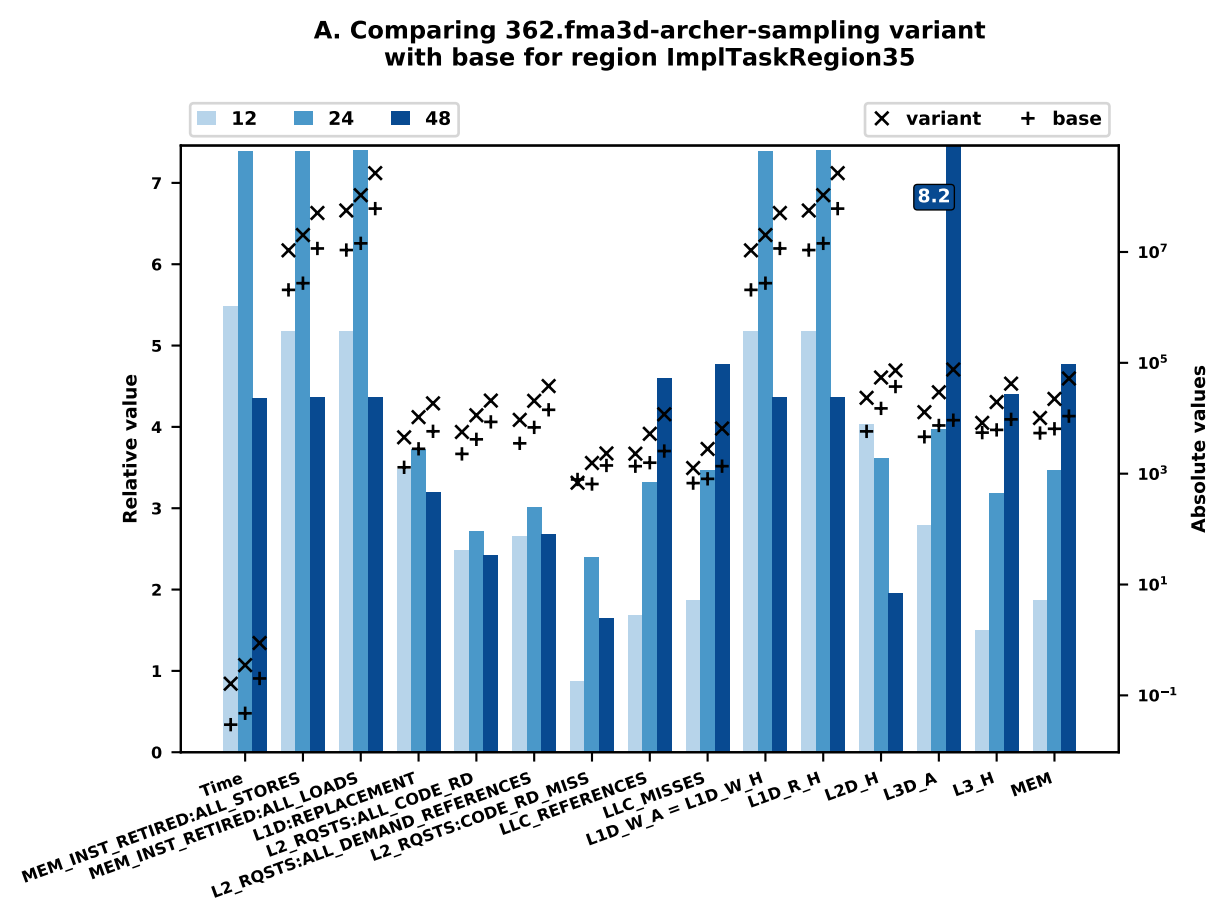

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion34
12
24
48
variant
base
3.2
3.1
4.1
4.9
3.9
Relative value
Absolute values
0.0
0.5
1.0
1.5
2.0
2.5
3.0
10^{-3}
10^{-1}
10^{1}
10^{3}
10^{5}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

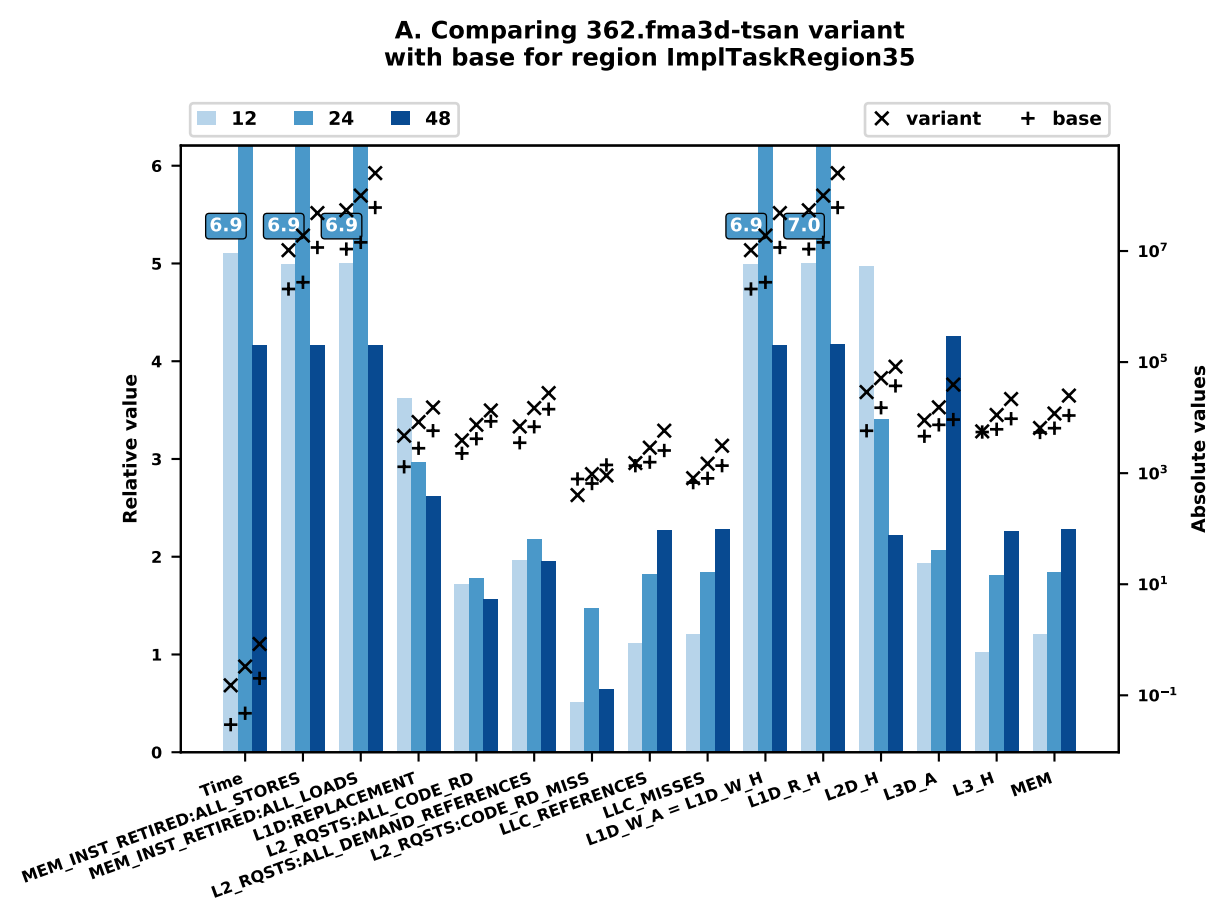

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion34
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
5.5
5.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

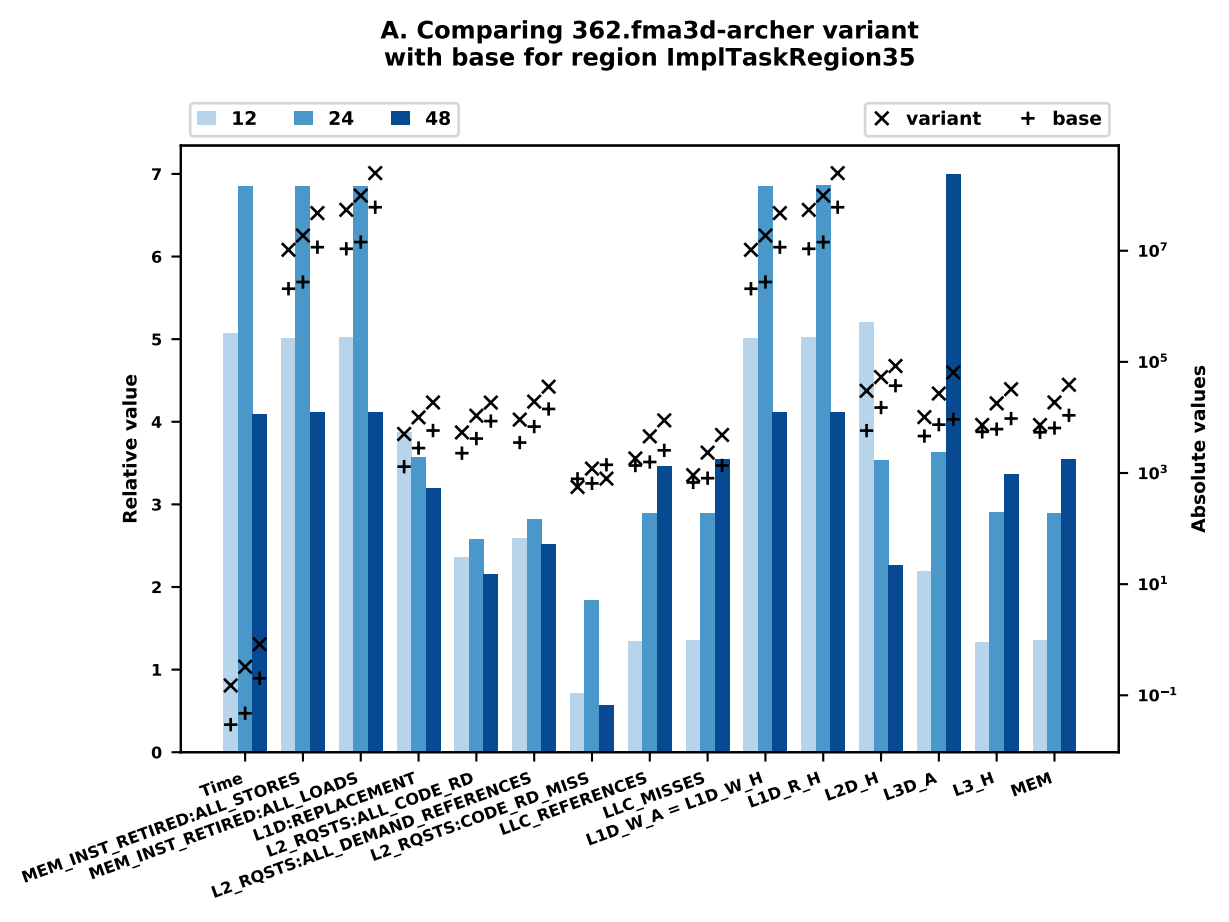

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion35
12
24
48
variant
base
Relative value
Absolute values
7.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

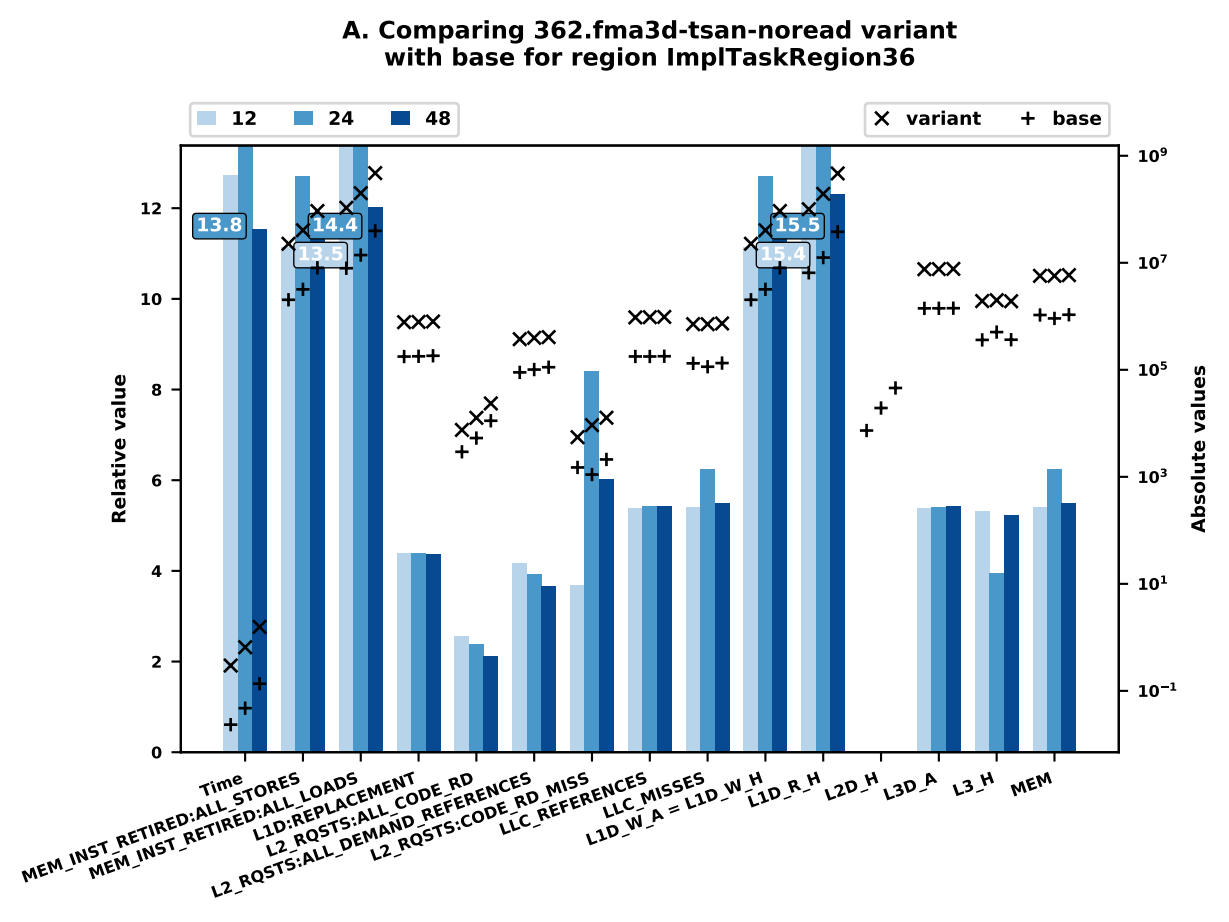

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion35
12
24
48
variant
base
7.5
Relative value
Absolute values
0
1
2
3
4
5
6
7
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

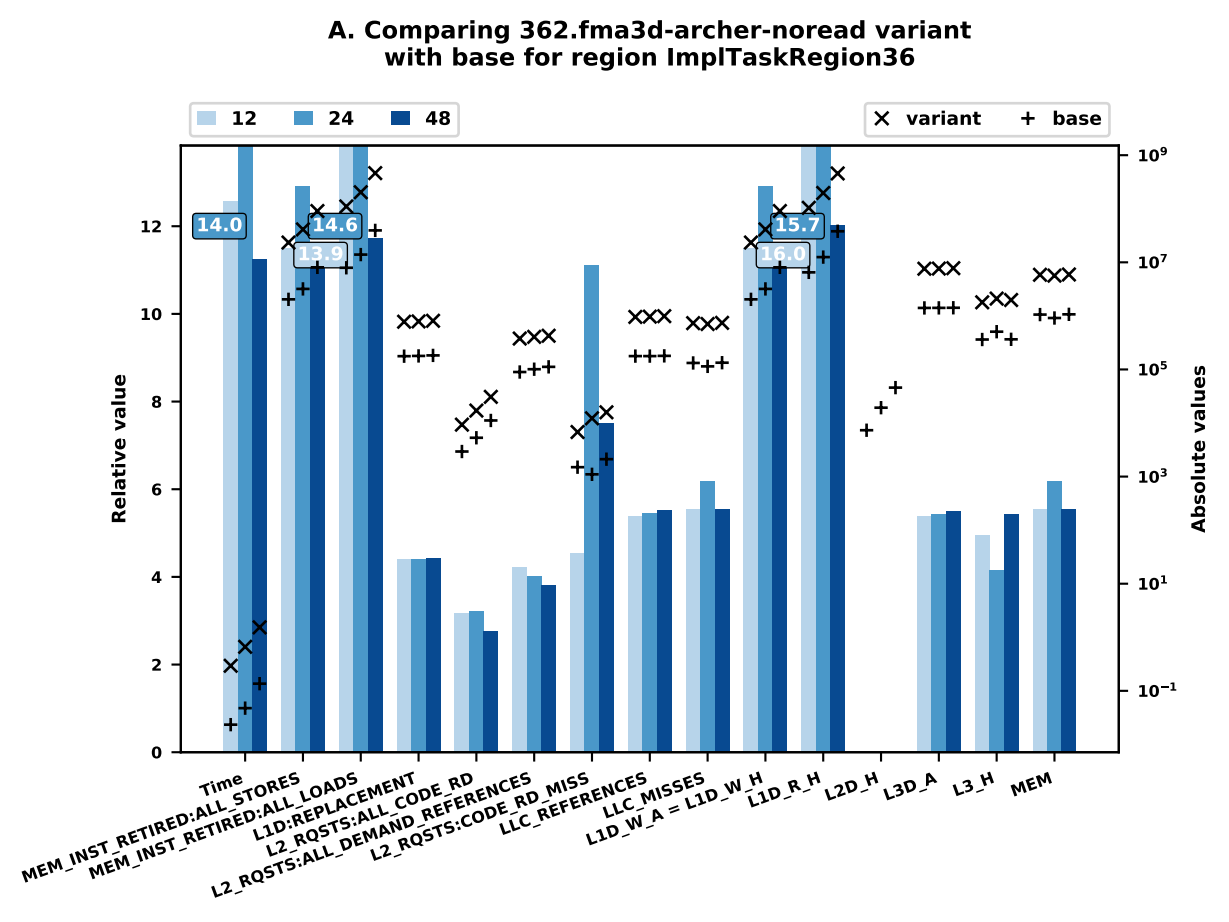

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion35
12
24
48
variant
base
7.5
Relative value
Absolute values
0
1
2
3
4
5
6
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

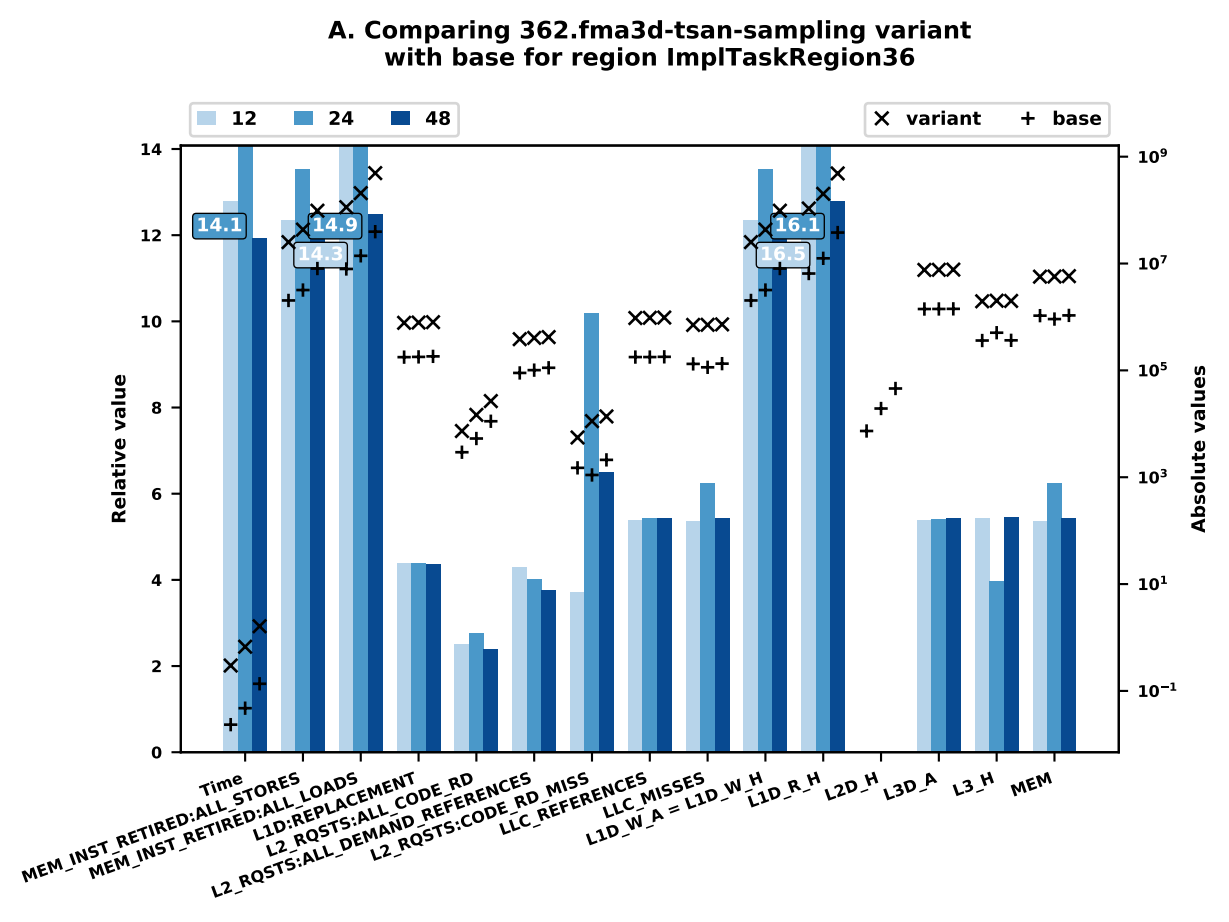

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion35
12
24
48
variant
base
8.2
Relative value
Absolute values
0
1
2
3
4
5
6
7
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

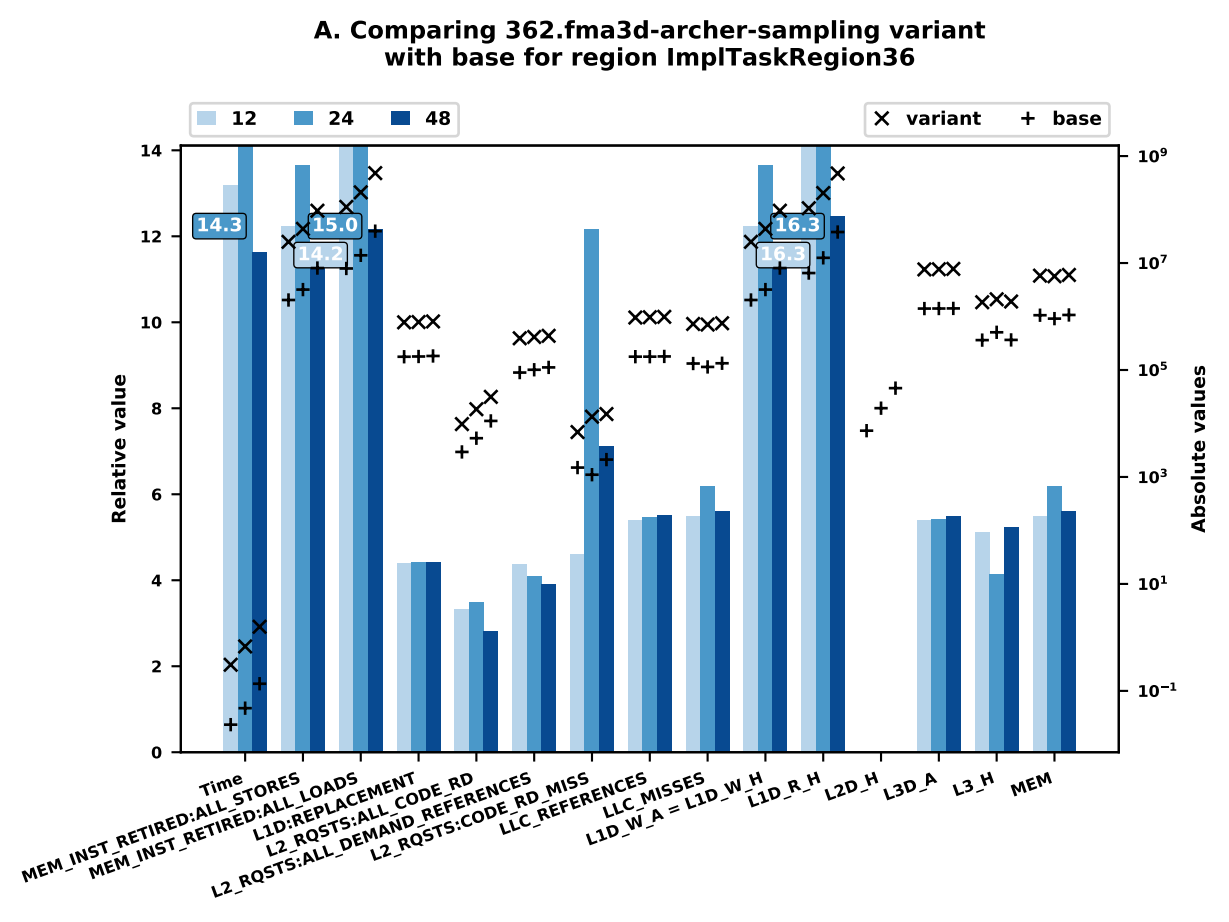

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion35
12
24
48
variant
base
6.9
6.9
6.9
6.9
7.0
Relative value
Absolute values
0
1
2
3
4
5
6
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

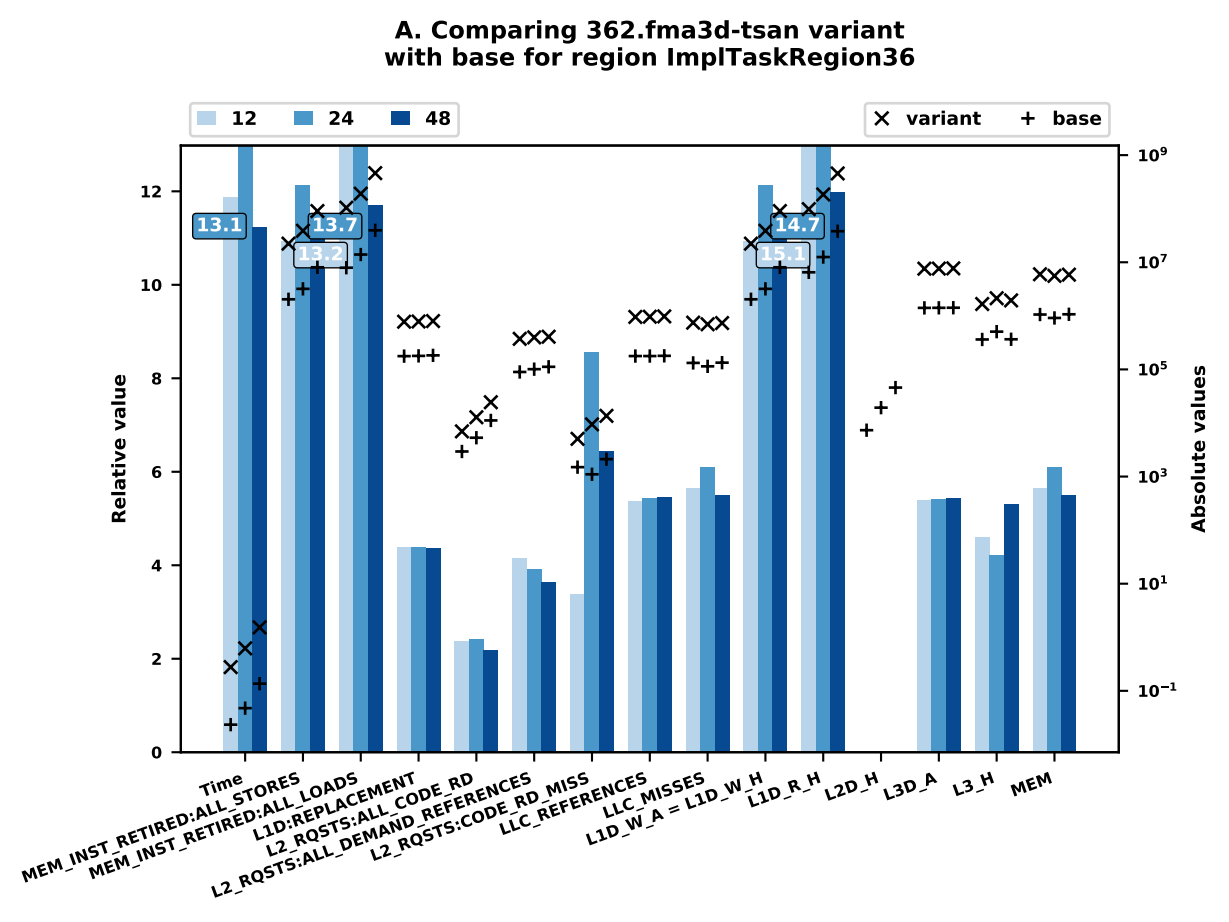

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion35
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
6
7
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

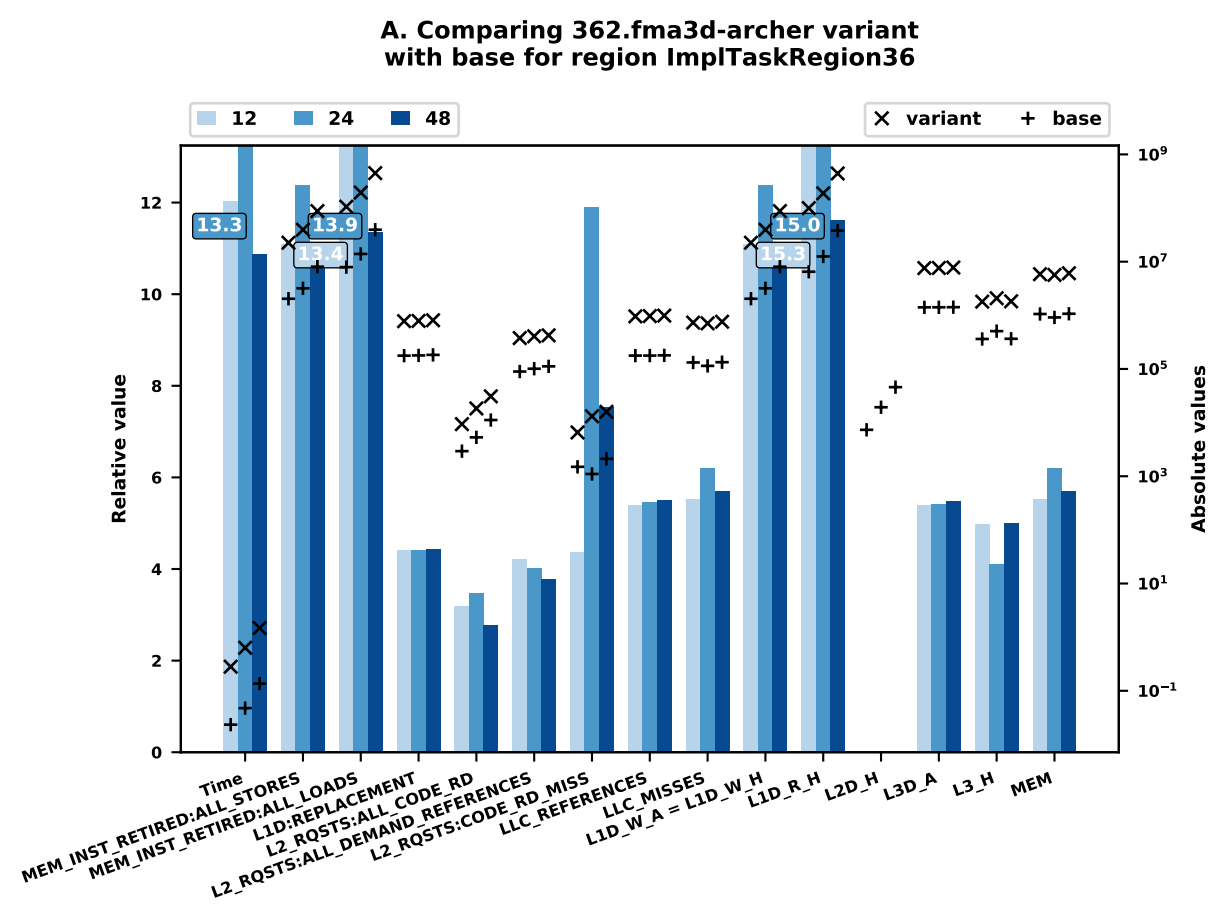

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion36
12
24
48
variant
base
13.8
14.4
13.5
15.5
15.4
Relative value
Absolute values
0
2
4
6
8
10
12
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
10^{9}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

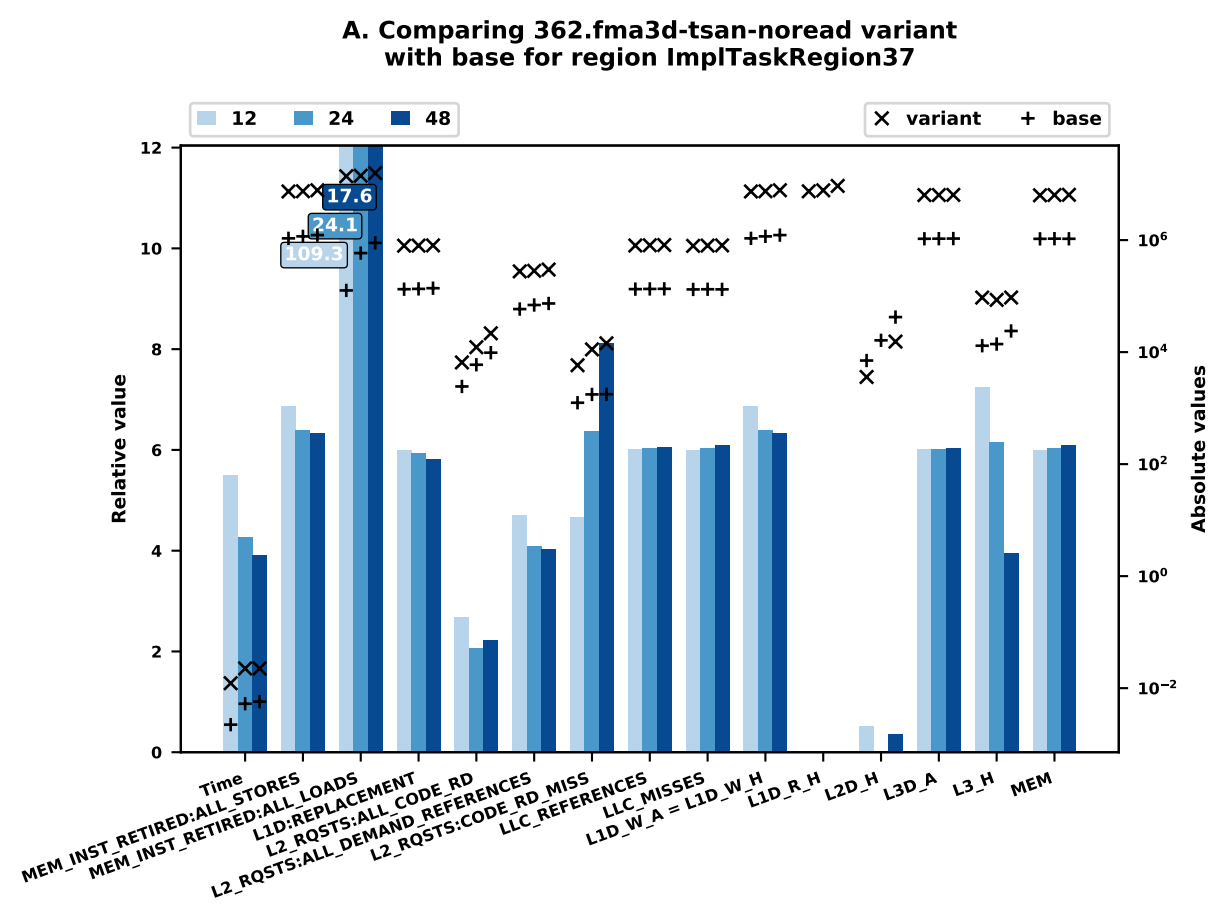

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion36
12
24
48
variant
base
14.0
14.6
13.9
15.7
16.0
Relative value
Absolute values
0
2
4
6
8
10
12
10^{9}
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

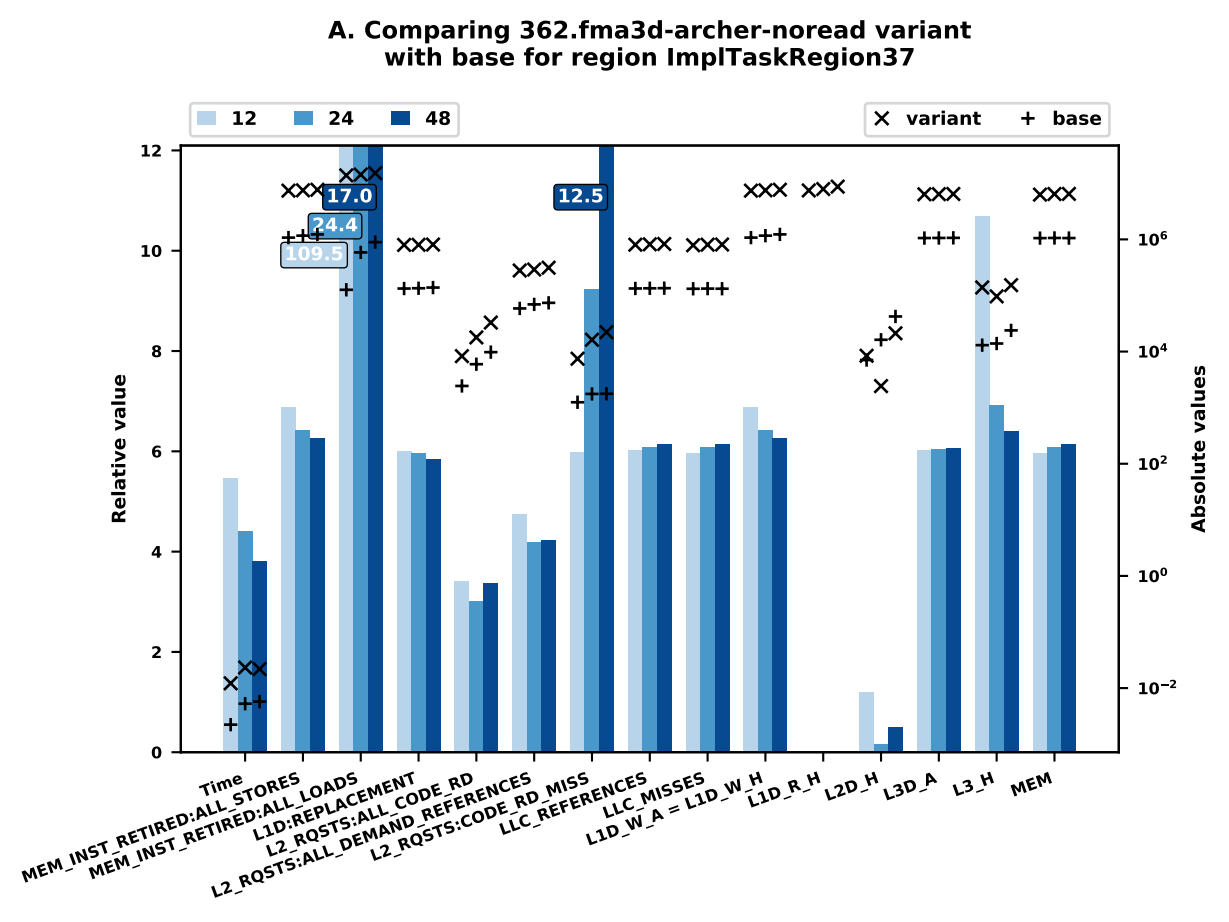

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion36
12
24
48
variant
base
Relative value
Absolute values
14.1
14.9
14.3
16.1
16.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

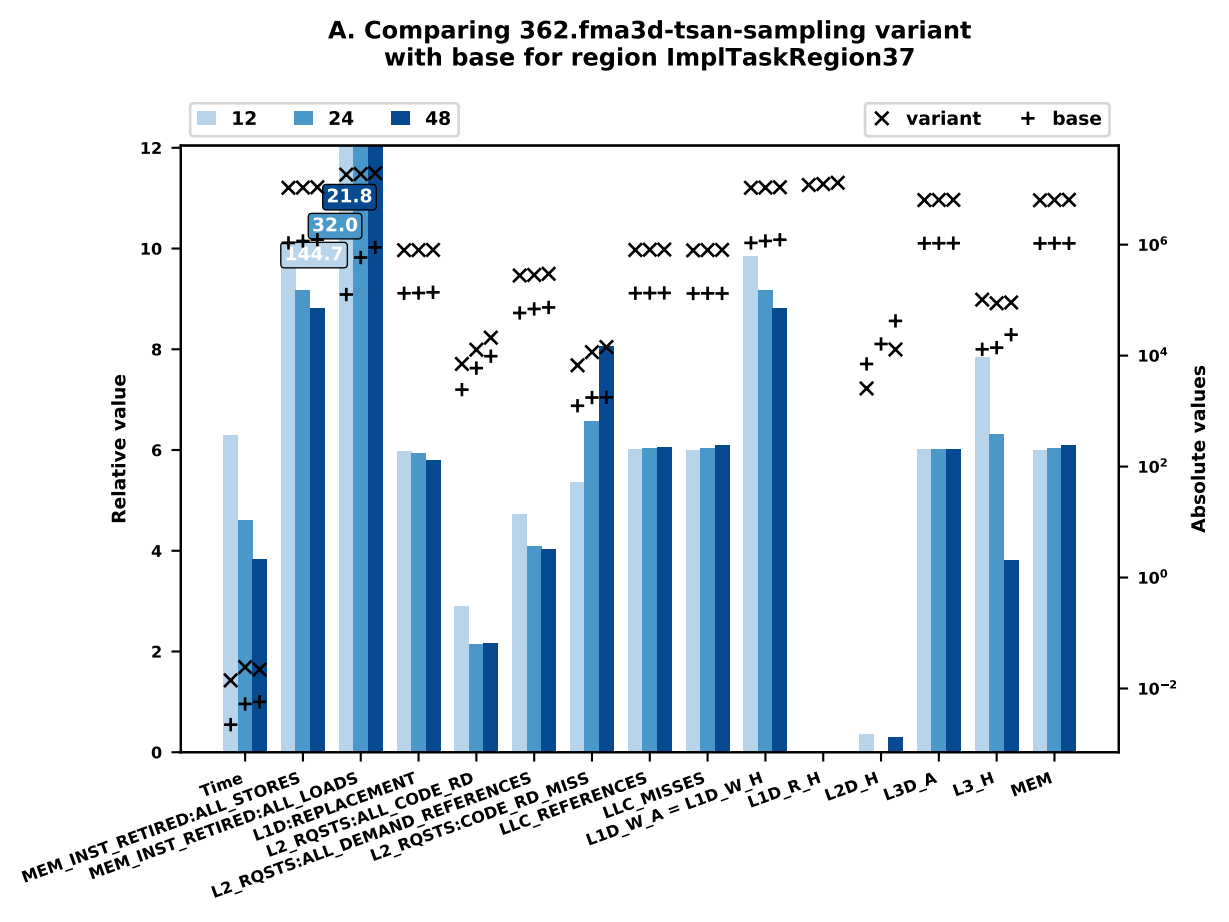

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion36
12
24
48
variant
base
Relative value
Absolute values
14.3
15.0
14.2
16.3
16.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

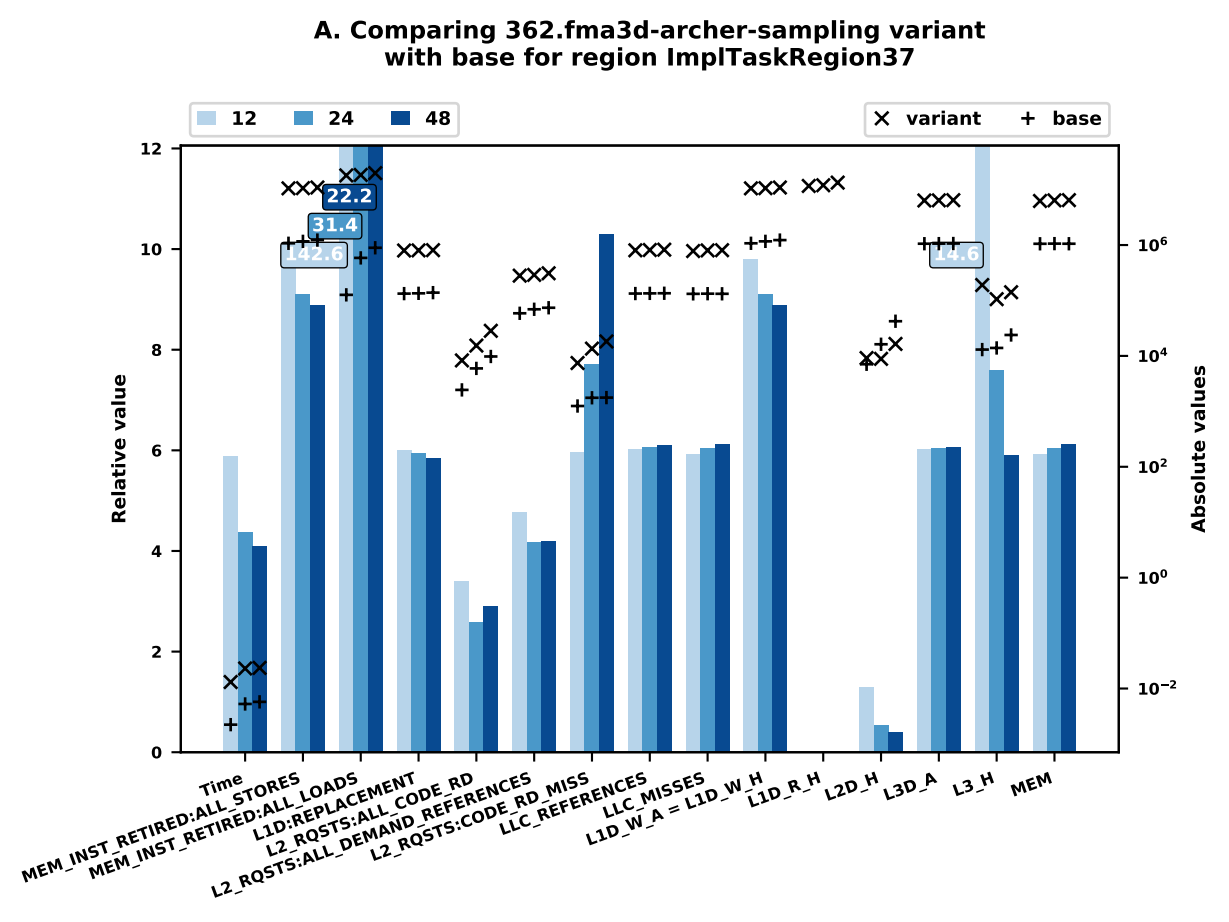

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion36
12
24
48
variant
base
13.1
13.7
13.2
14.7
15.1
Relative value
Absolute values
0
2
4
6
8
10
12
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
10^{9}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

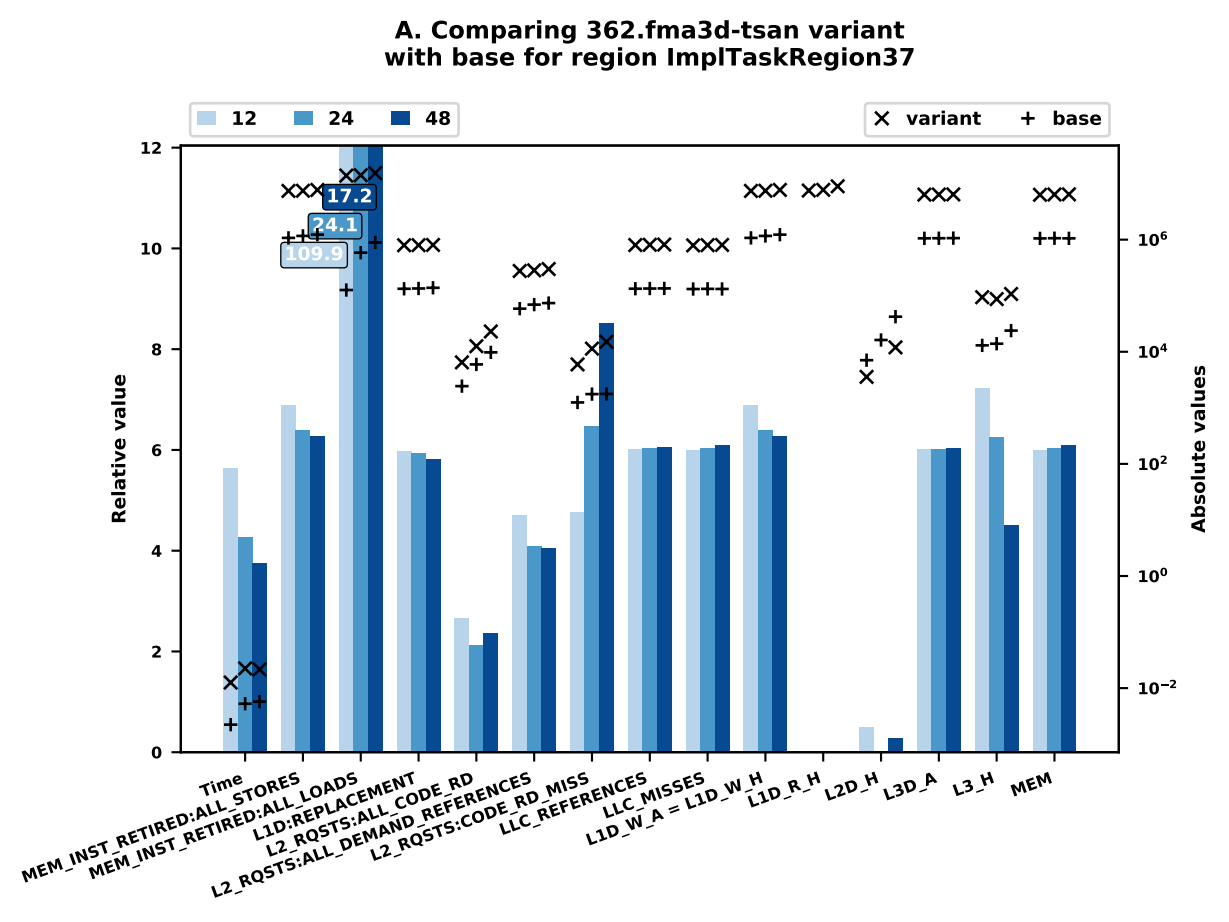

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion36
12
24
48
variant
base
13.3
13.9
13.4
15.0
15.3
Relative value
Absolute values
0
2
4
6
8
10
12
10^{9}
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

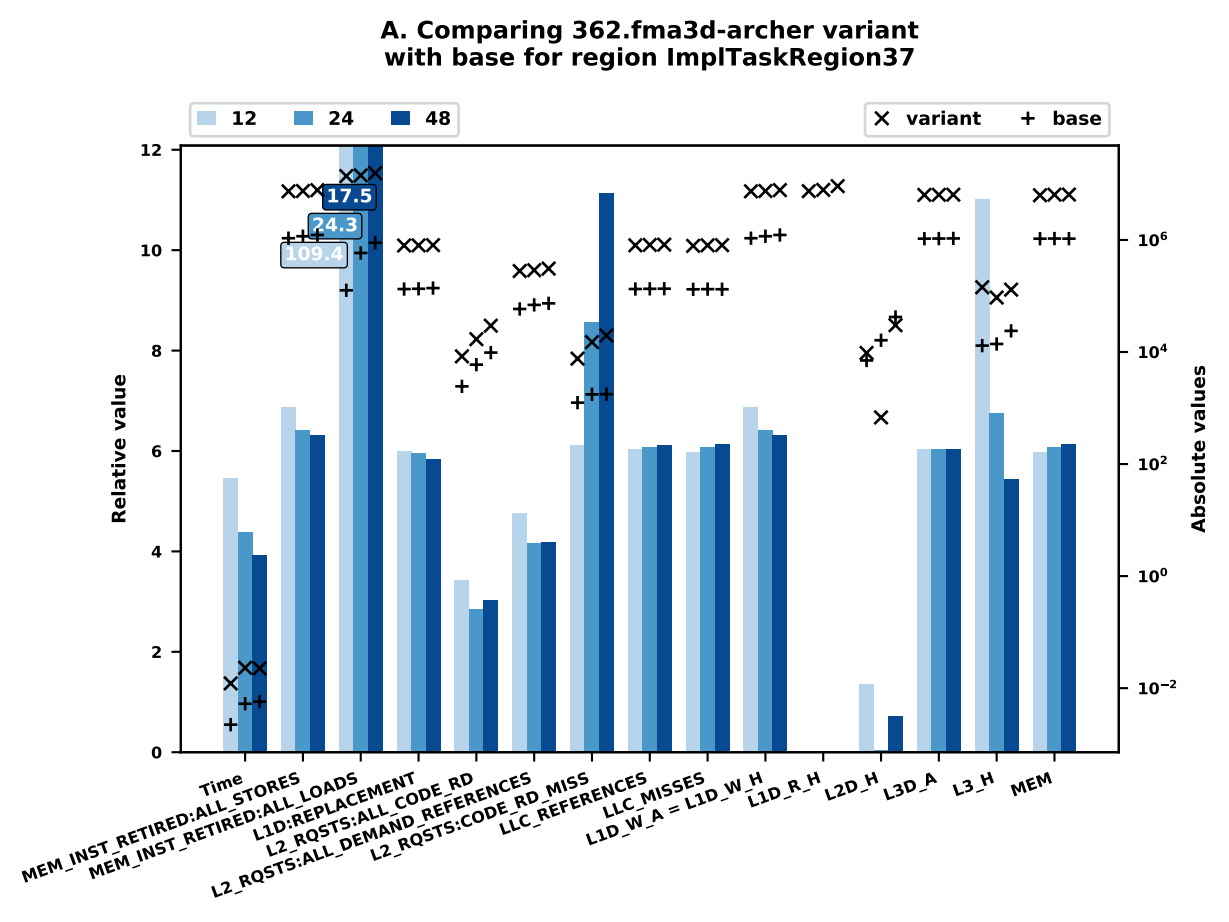

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion37
12
24
48
variant
base
Relative value
Absolute values
17.6
24.1
109.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

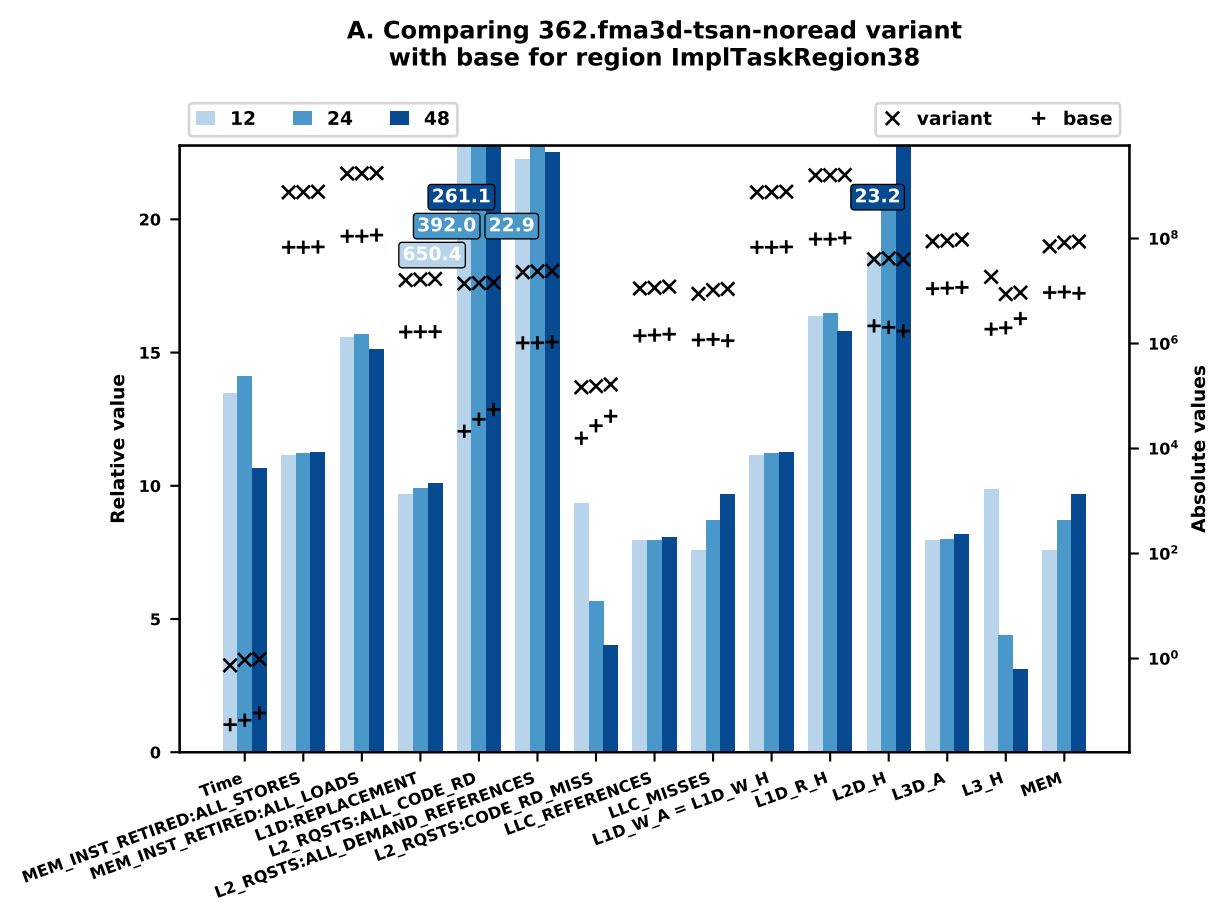

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion37
12
24
48
variant
base
Relative value
Absolute values
17.0
24.4
109.5
12.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

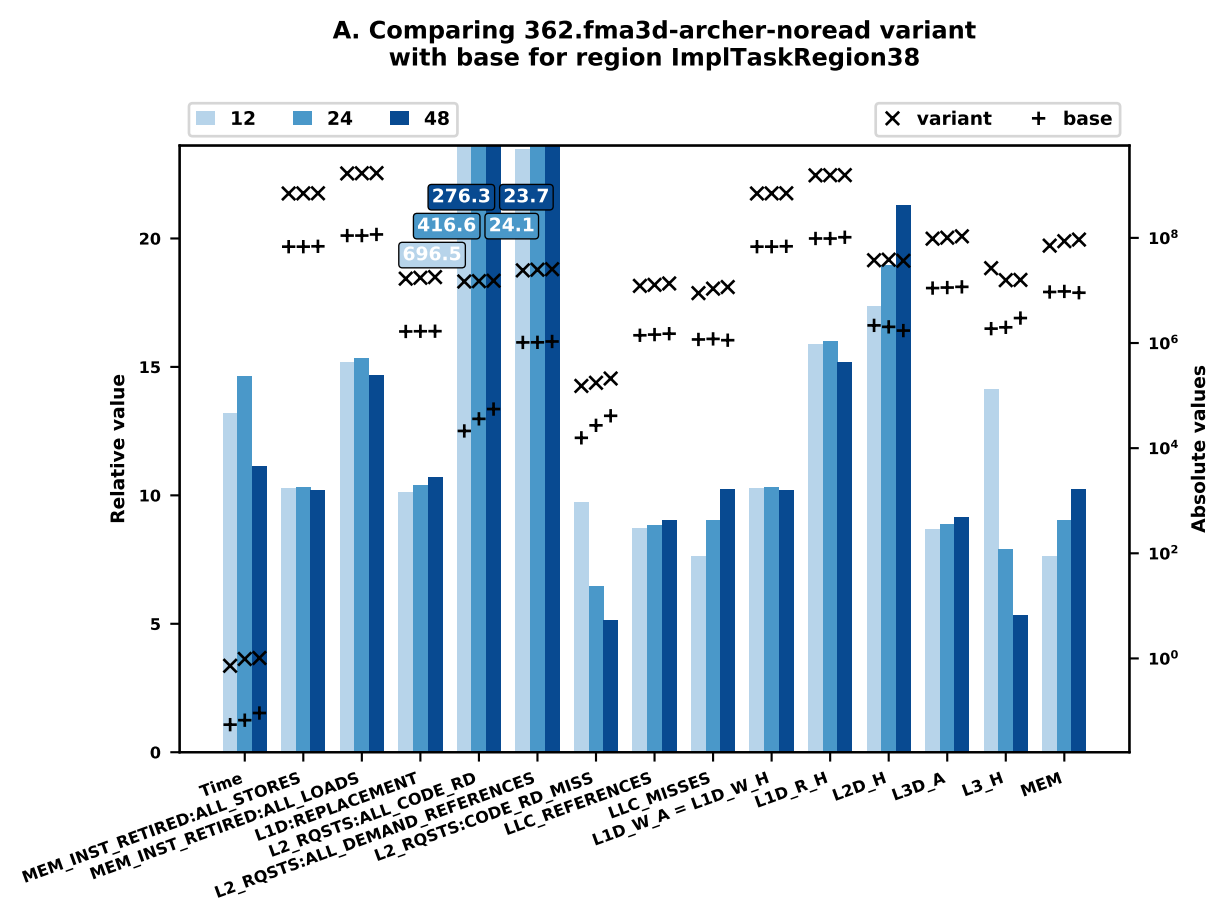

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion37
12
24
48
variant
base
Relative value
Absolute values
21.8
32.0
144.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

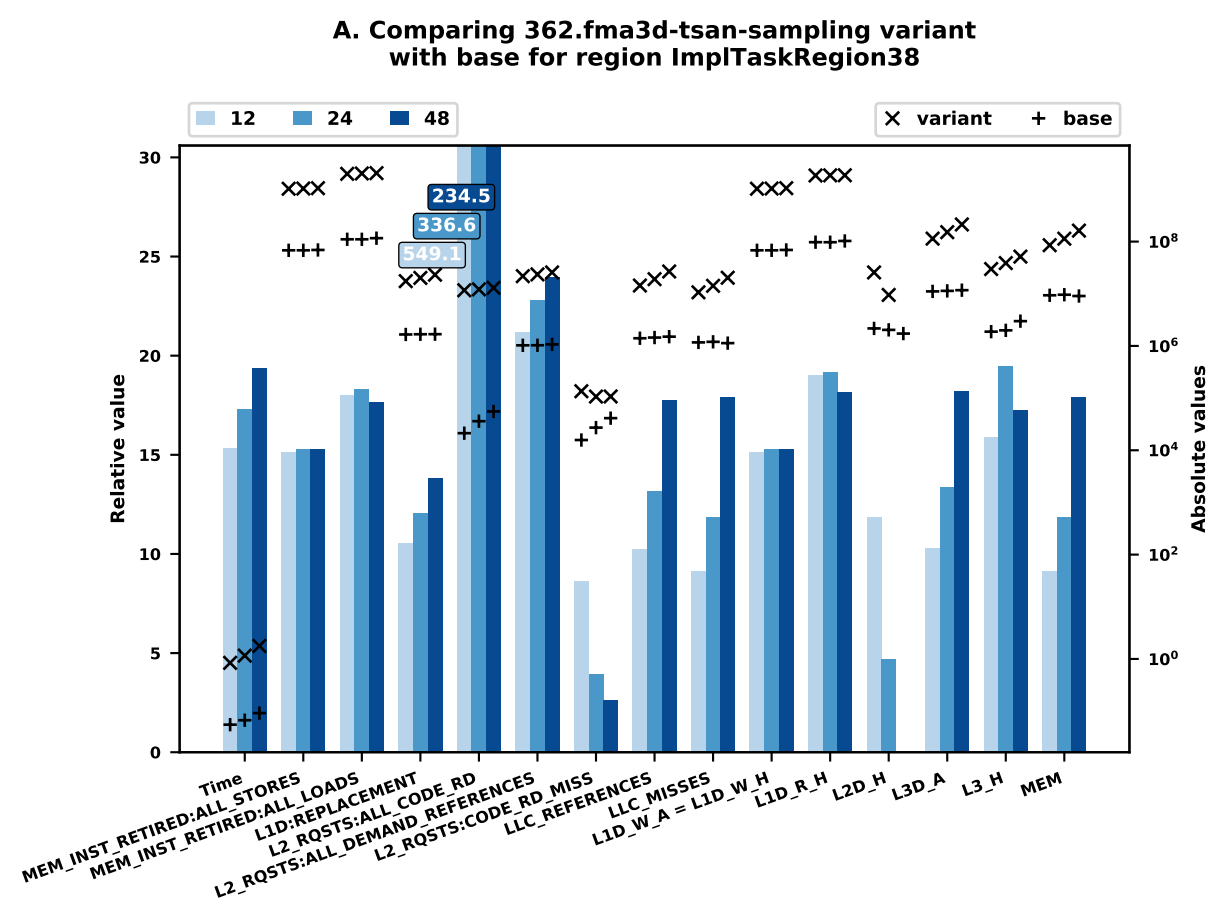

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion37
12
24
48
variant
base
Relative value
Absolute values
22.2
31.4
142.6
14.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

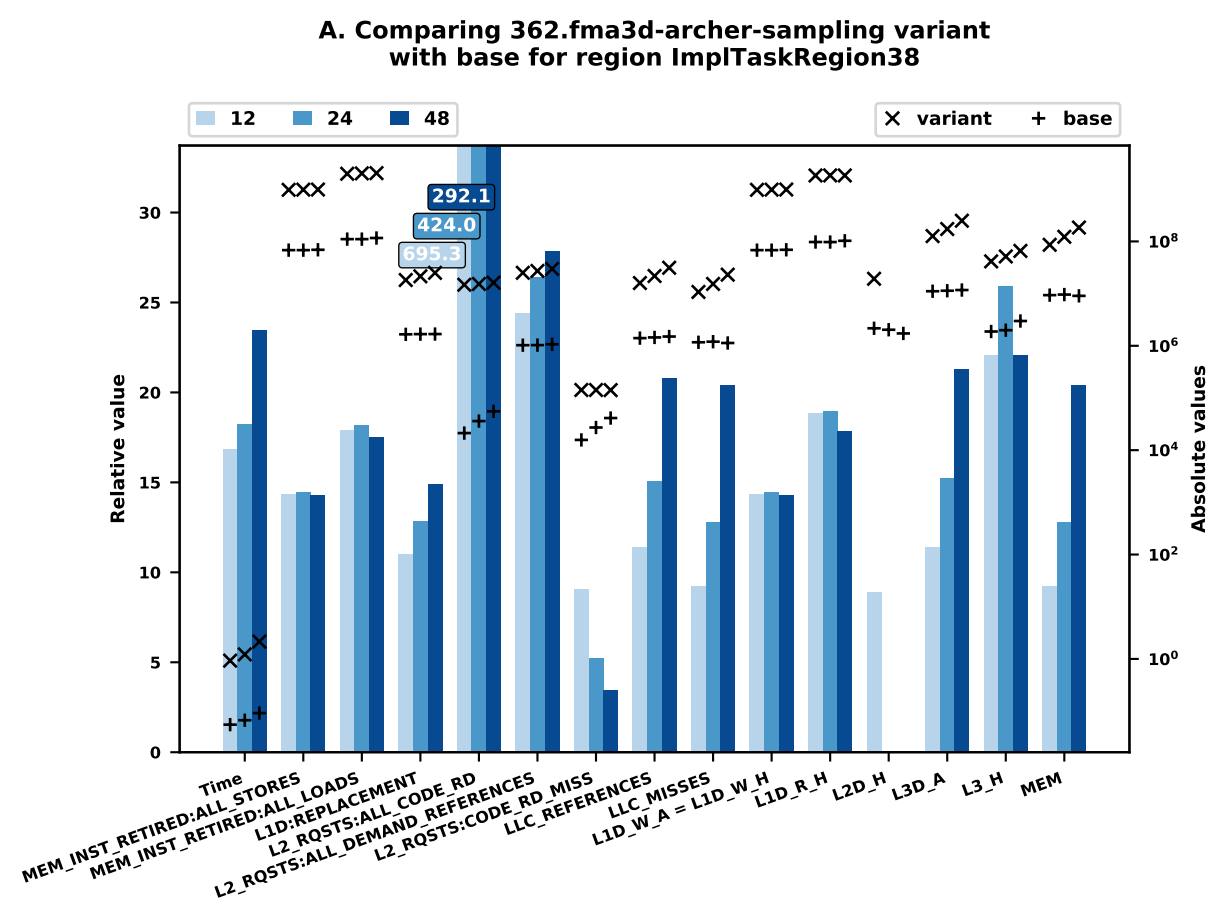

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion37
12
24
48
variant
base
Relative value
Absolute values
17.2
24.1
109.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

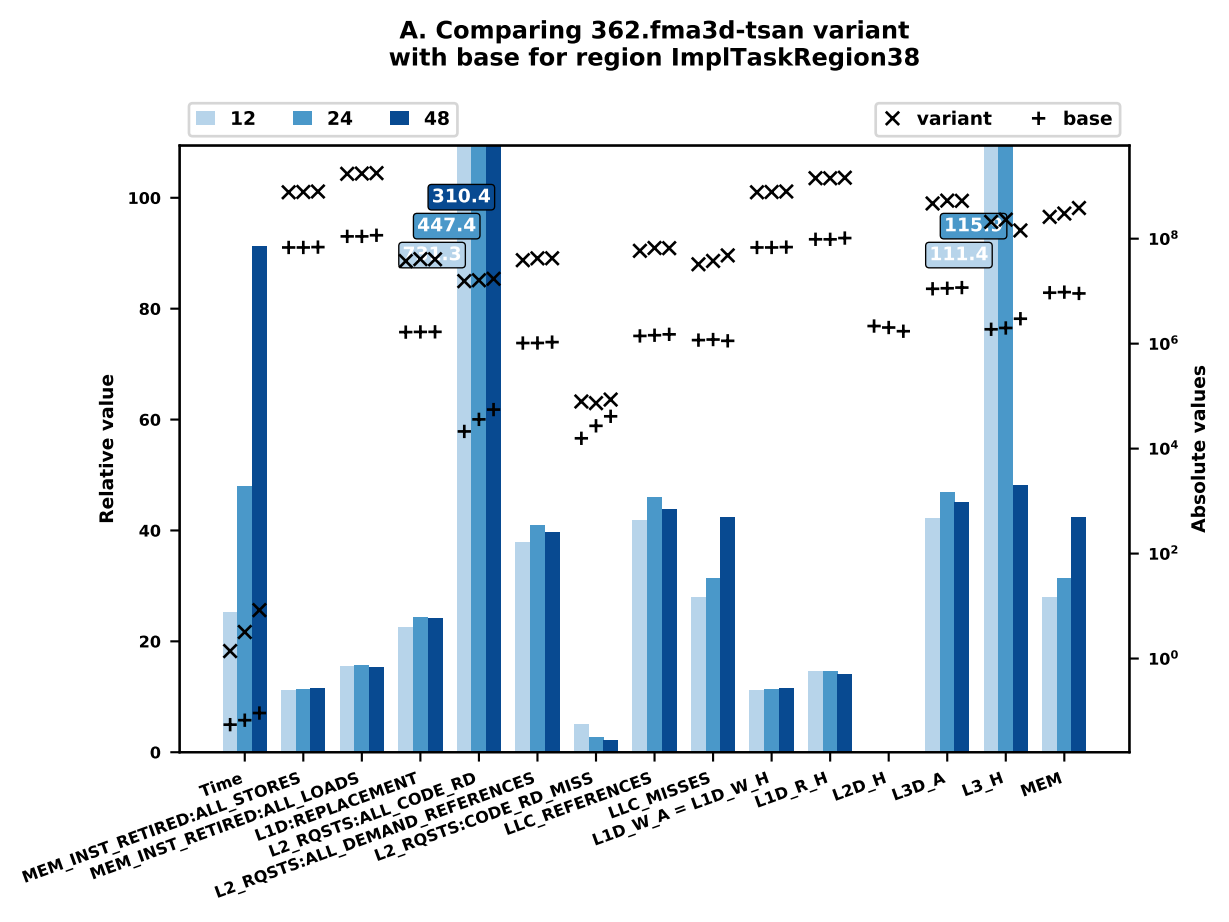

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion37
12
24
48
variant
base
Relative value
Absolute values
17.5
24.3
109.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

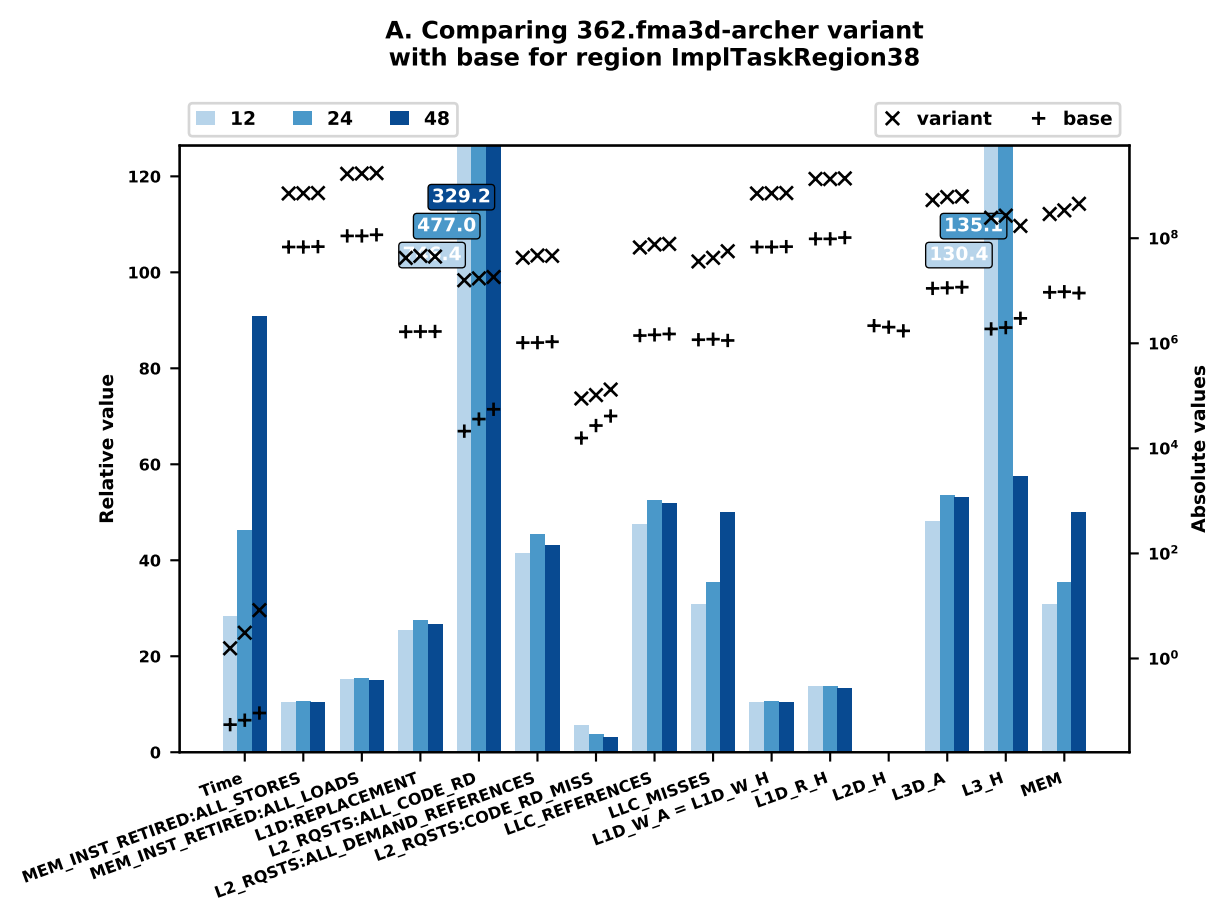

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion38
12
24
48
variant
base
261.1
392.0
650.4
22.9
23.2
Relative value
Absolute values
0
5
10
15
20
10^0
10^2
10^4
10^6
10^8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

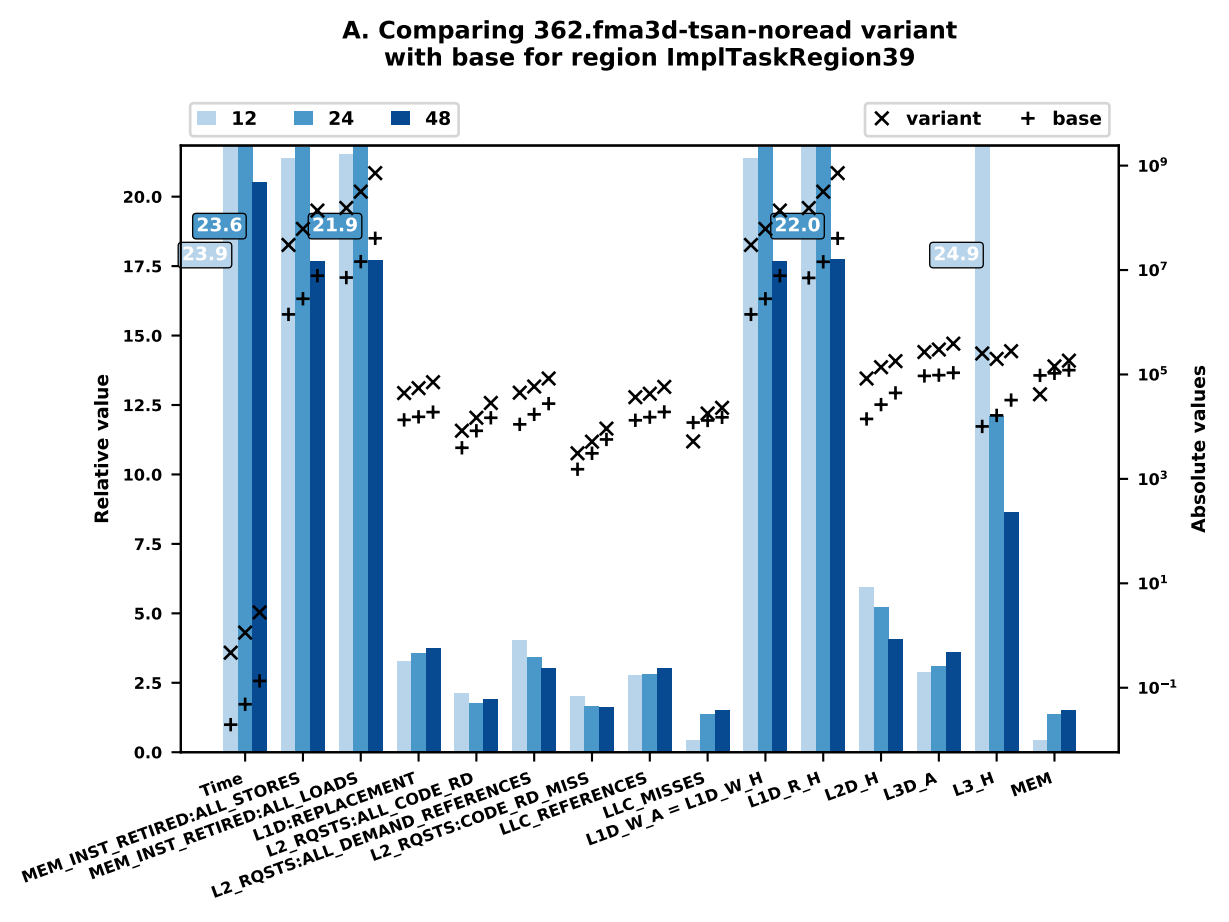

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion38
12
24
48
variant
base
276.3
23.7
416.6
24.1
696.5
Relative value
Absolute values
0
5
10
15
20
10^0
10^2
10^4
10^6
10^8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

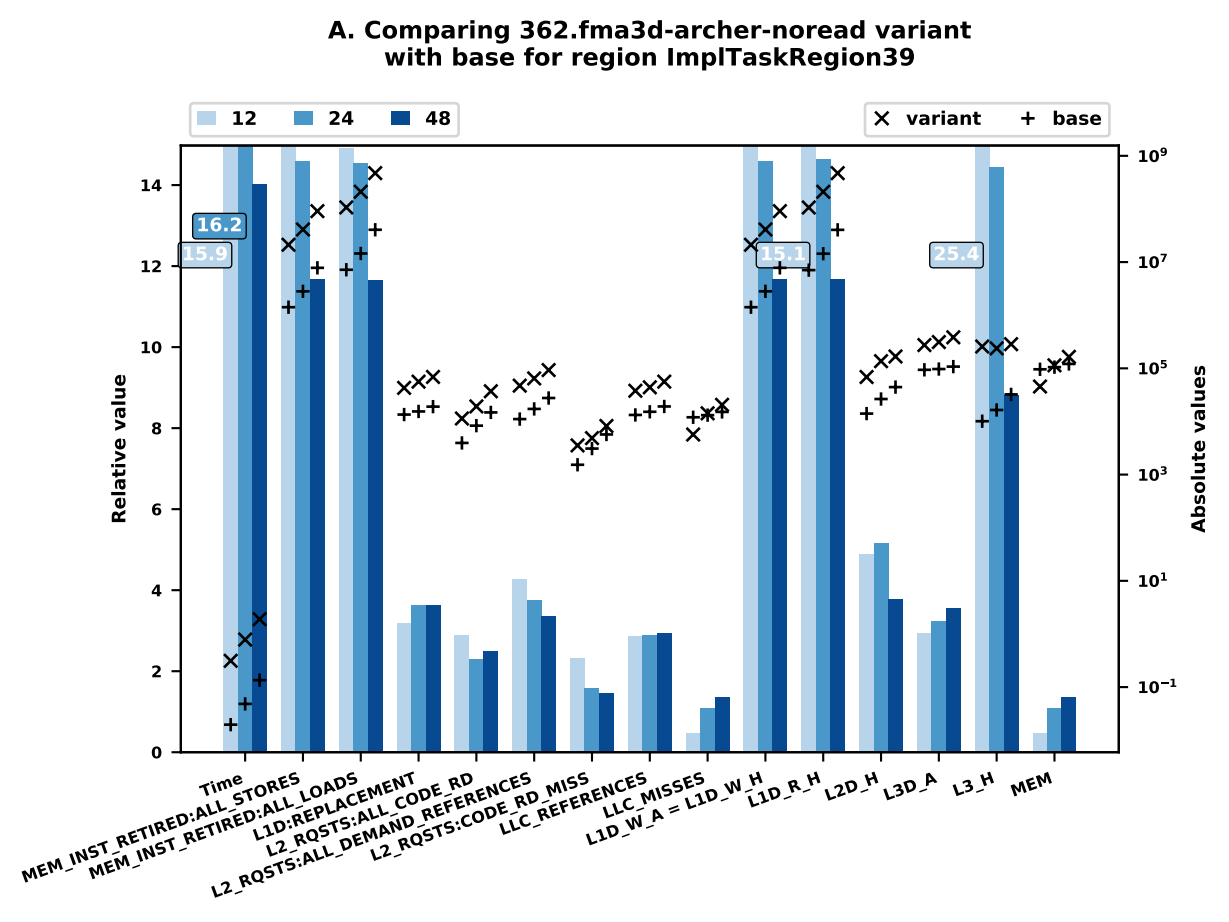

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion38
12
24
48
variant
base
234.5
336.6
549.1
Relative value
Absolute values
0
5
10
15
20
25
30
10^0
10^2
10^4
10^6
10^8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

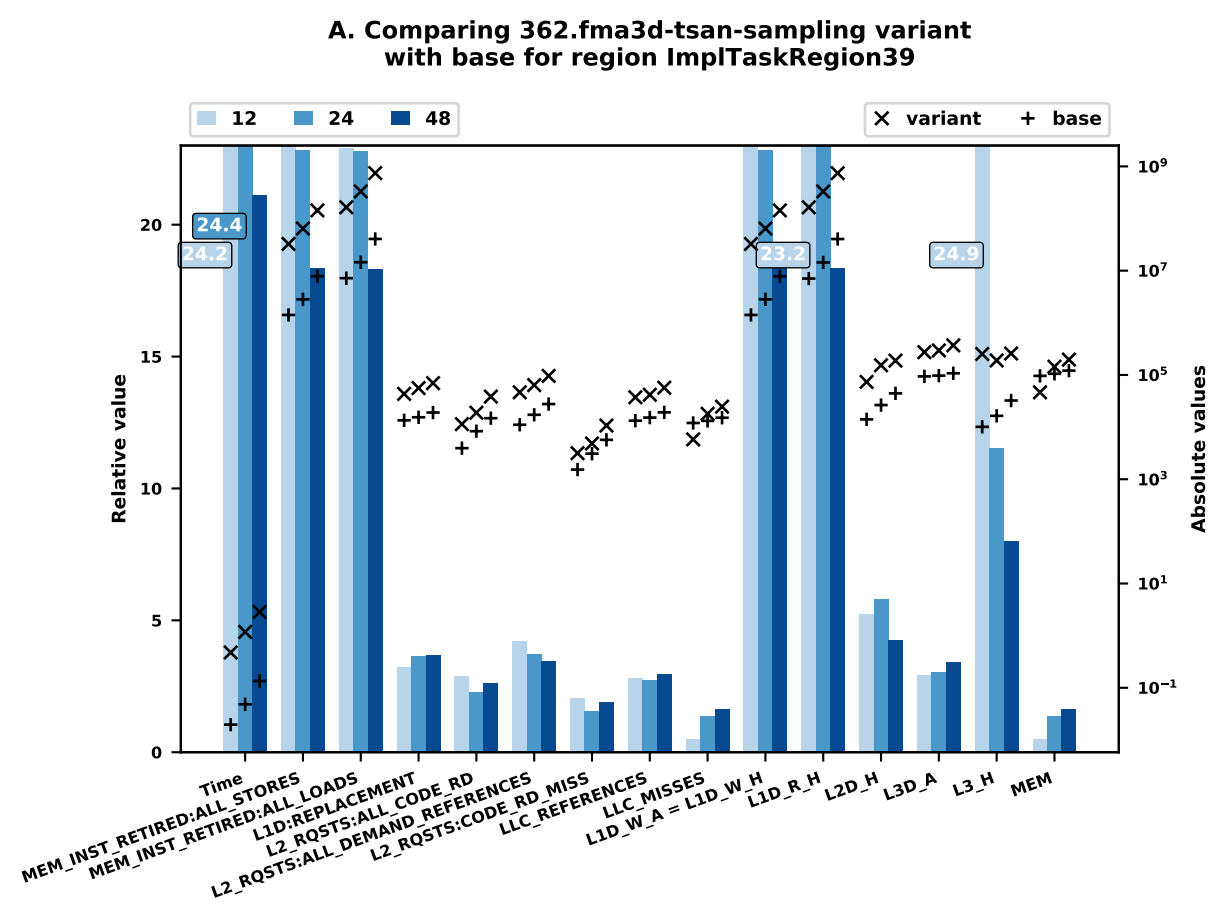

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion38
12
24
48
variant
base
292.1
424.0
695.3
Relative value
Absolute values
0
5
10
15
20
25
30
10^0
10^2
10^4
10^6
10^8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

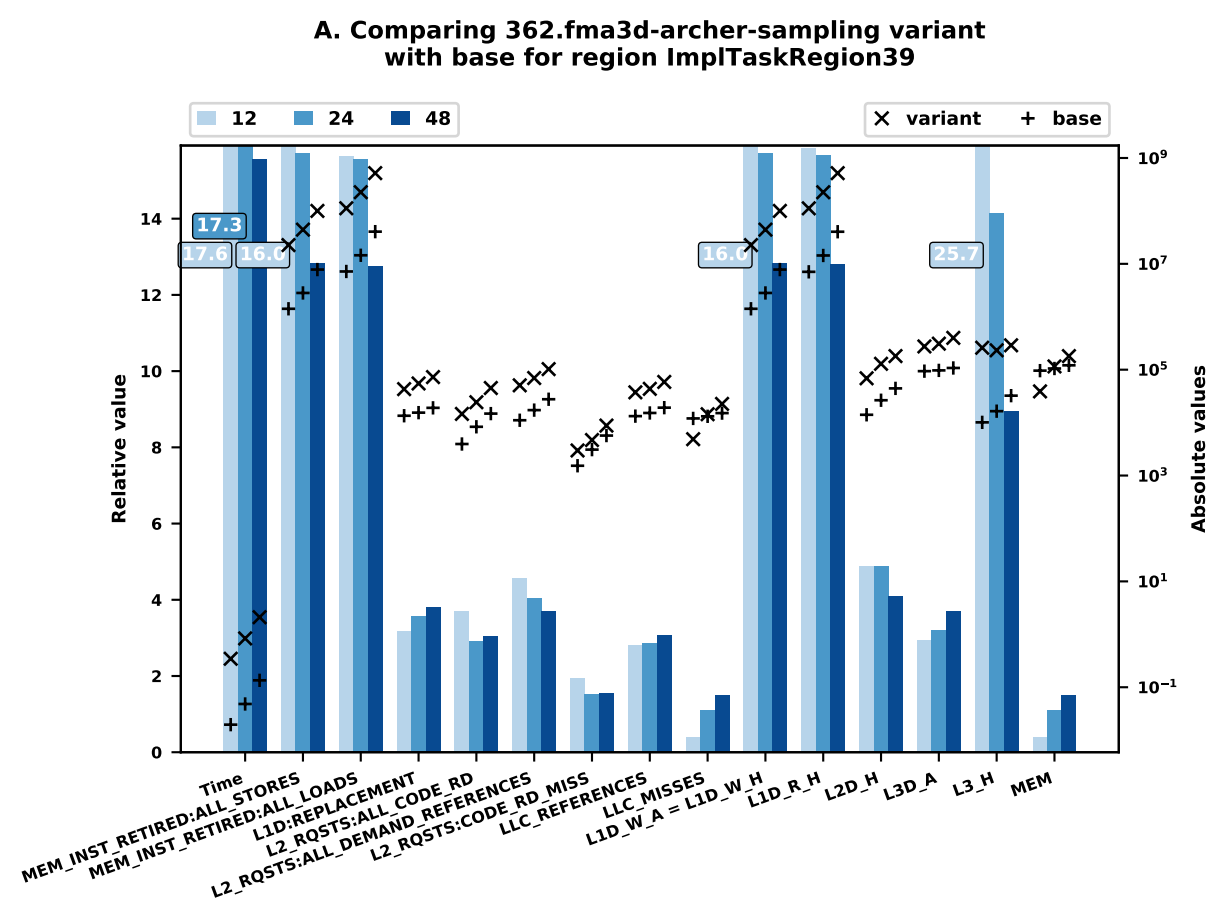

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion38
12
24
48
variant
base
Relative value
Absolute values
310.4
447.4
115.4
111.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

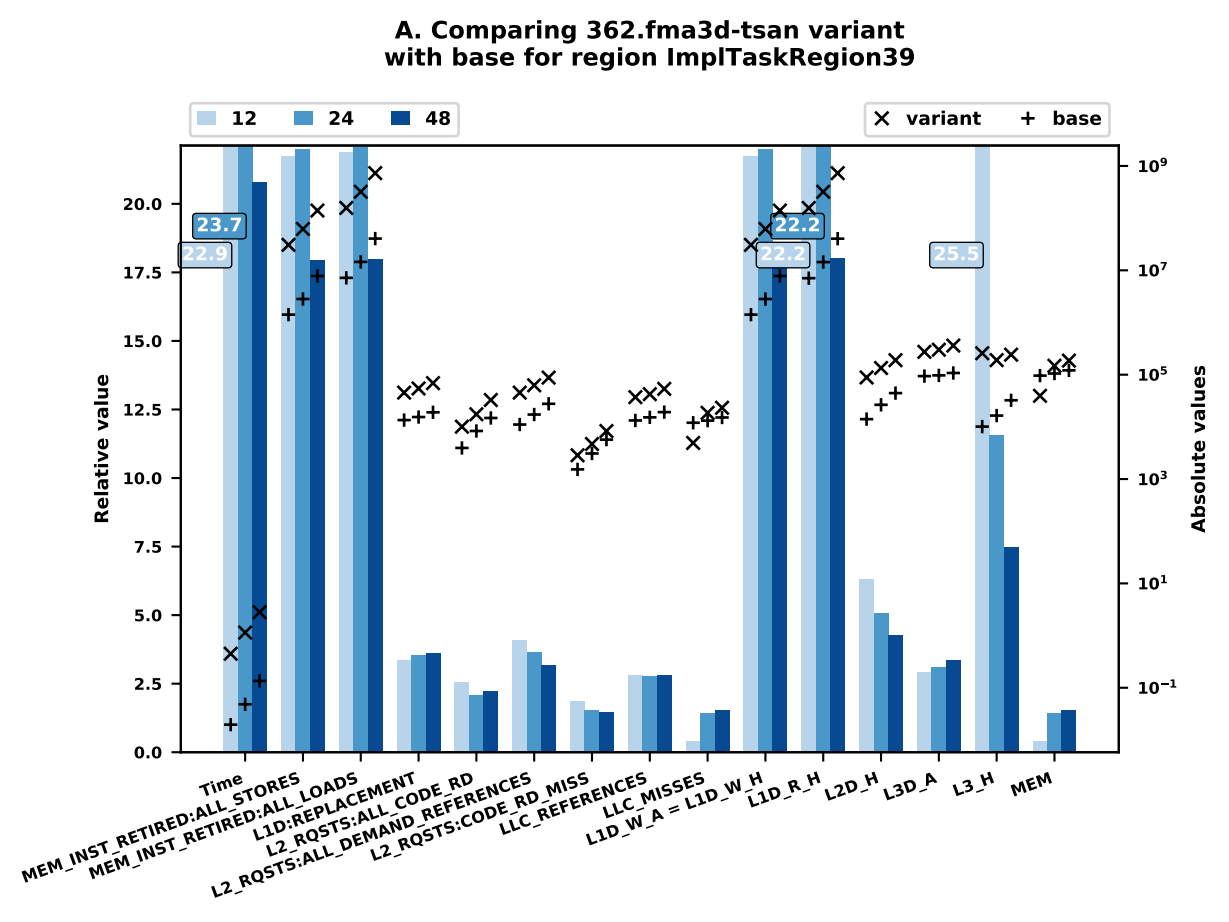

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion38
12
24
48
variant
base
Relative value
Absolute values
329.2
477.0
135.1
130.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

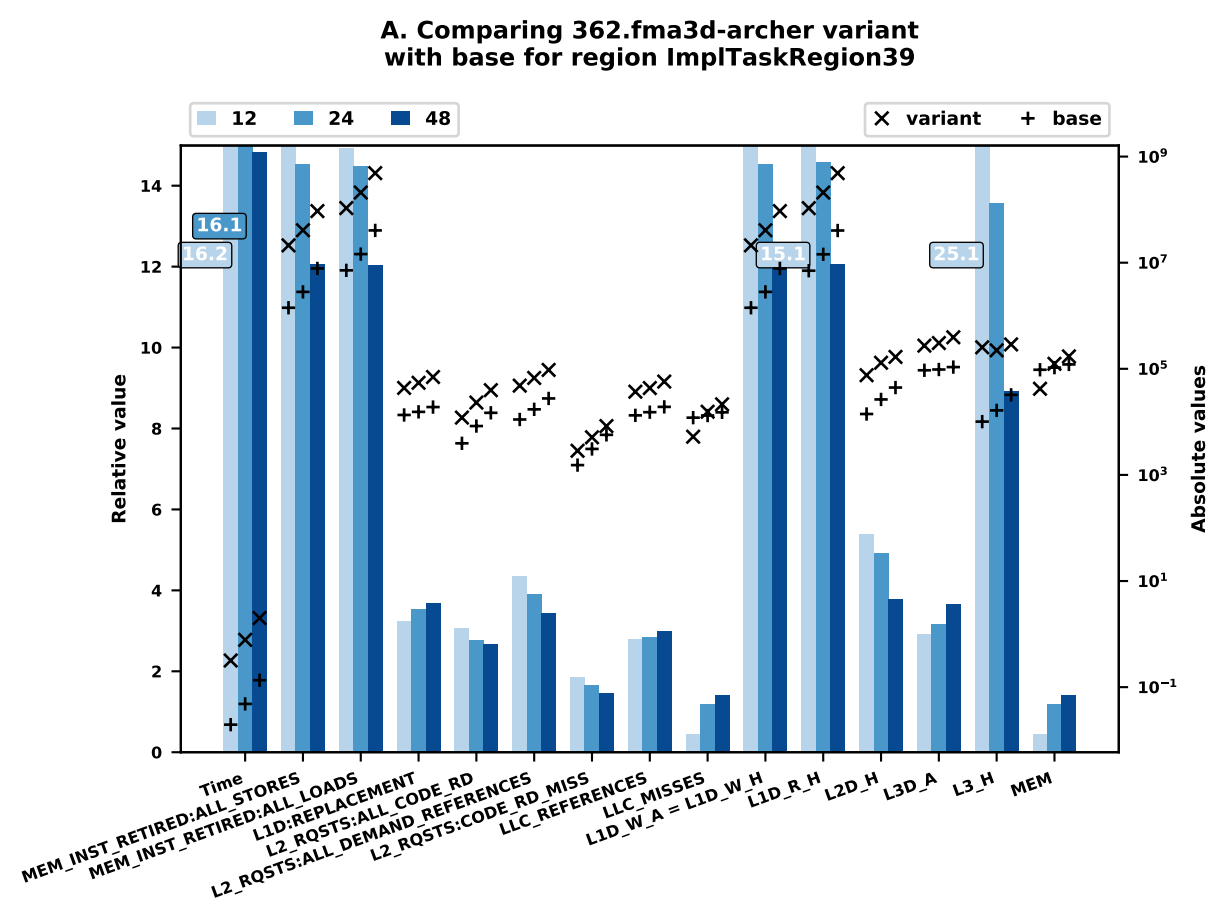

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion39
12
24
48
variant
base
Relative value
Absolute values
23.6
23.9
21.9
22.0
24.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

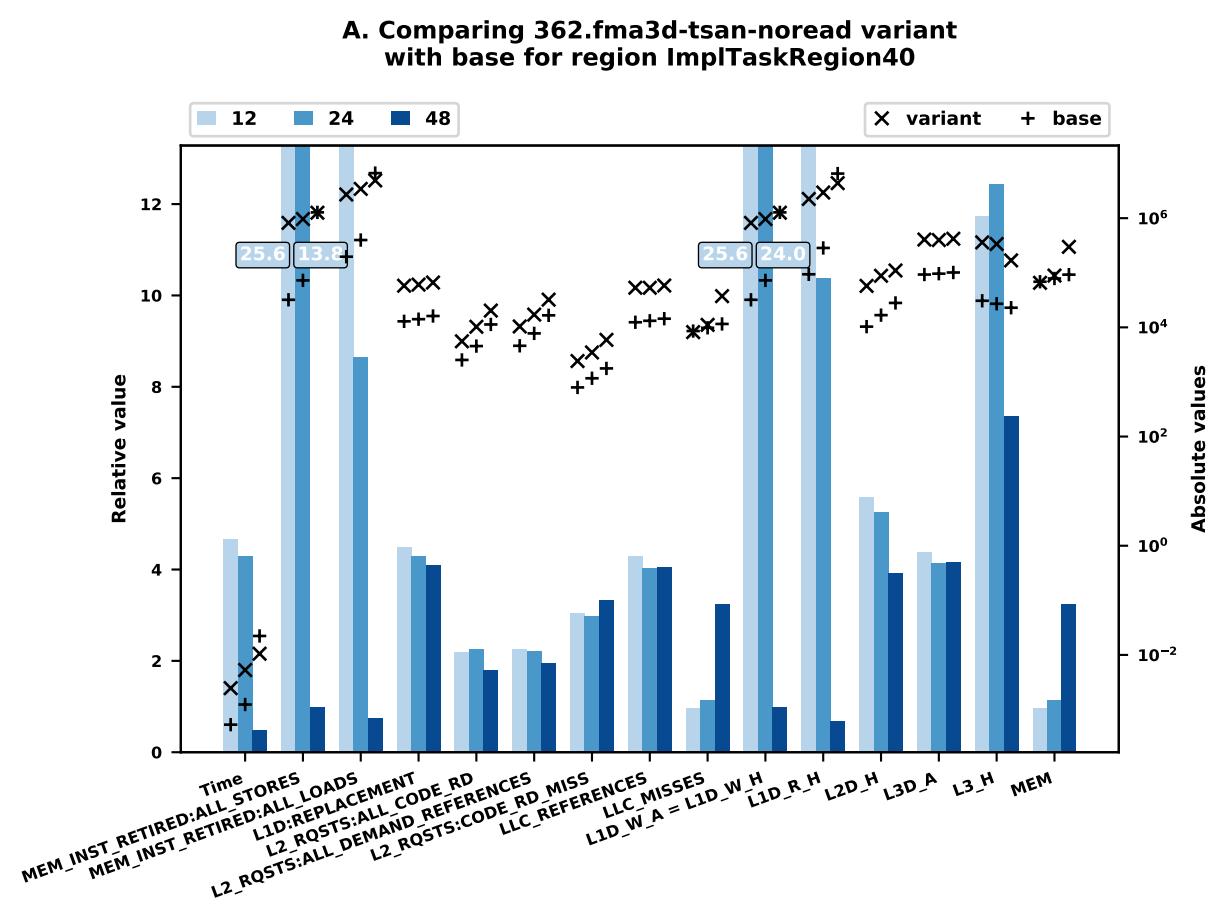

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion39
12
24
48
variant
base
16.2
15.9
15.1
25.4
Relative value
Absolute values
0
2
4
6
8
10
12
14
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
10^{9}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

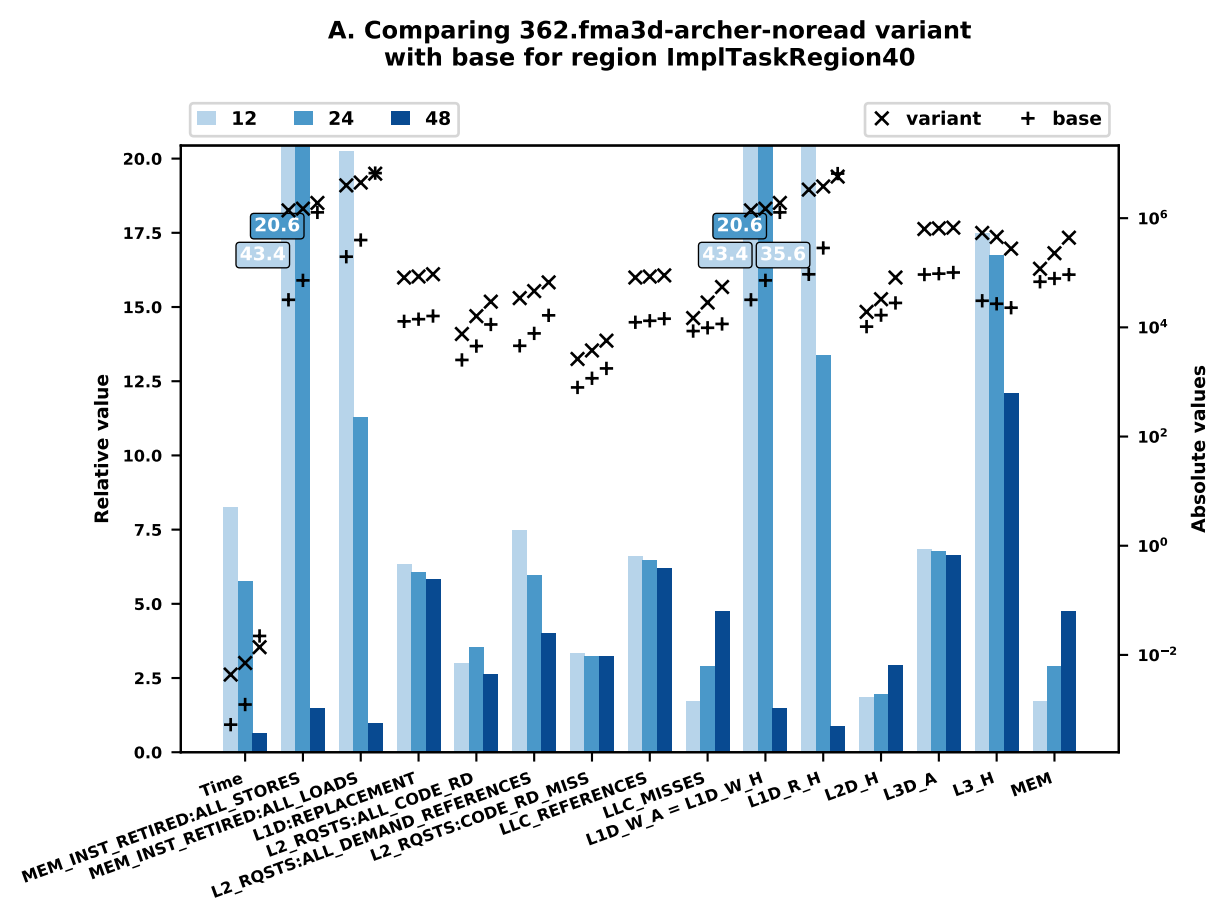

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion39
12
24
48
variant
base
24.4
24.2
23.2
24.9
Relative value
Absolute values
0
5
10
15
20
10^{9}
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

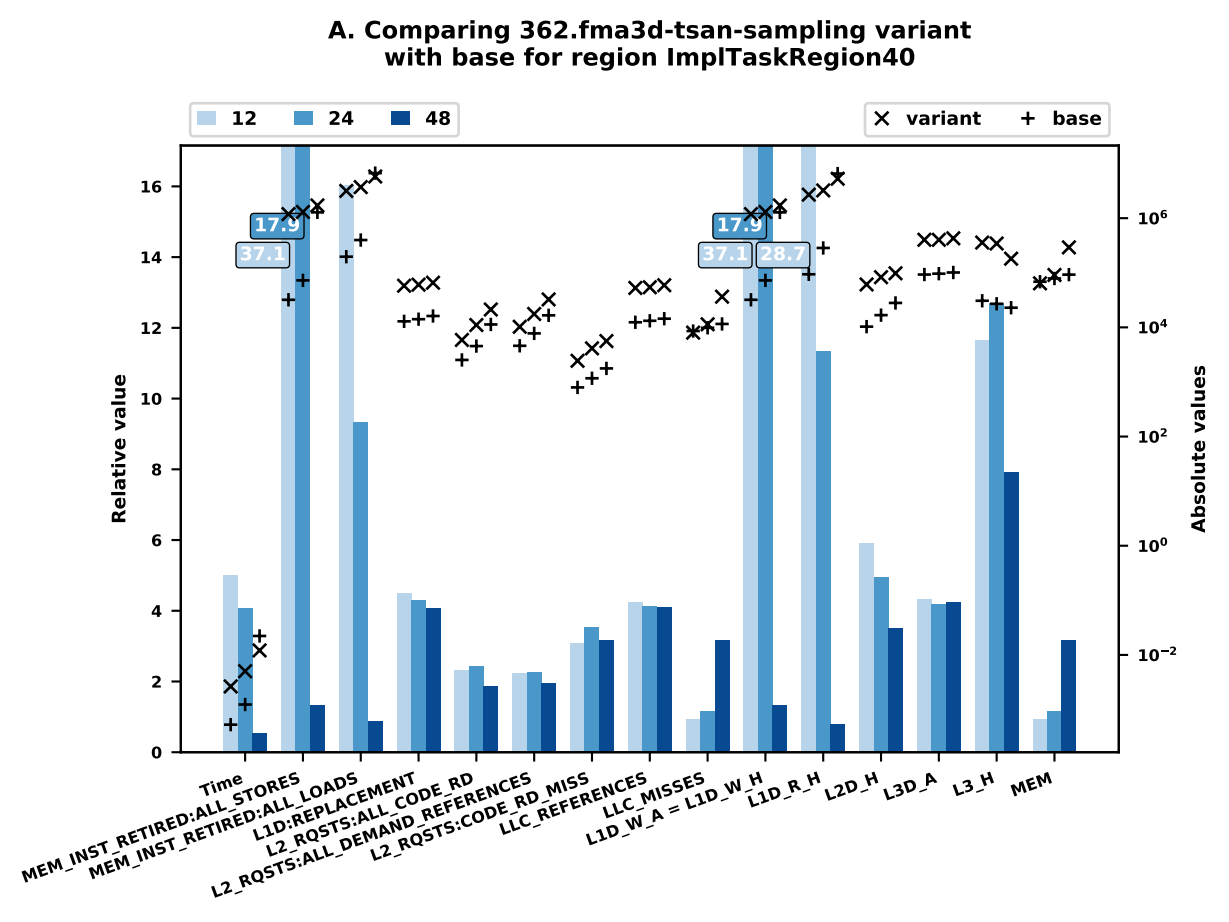

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion39
12
24
48
variant
base
Relative value
Absolute values
17.3
17.6
16.0
16.0
25.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

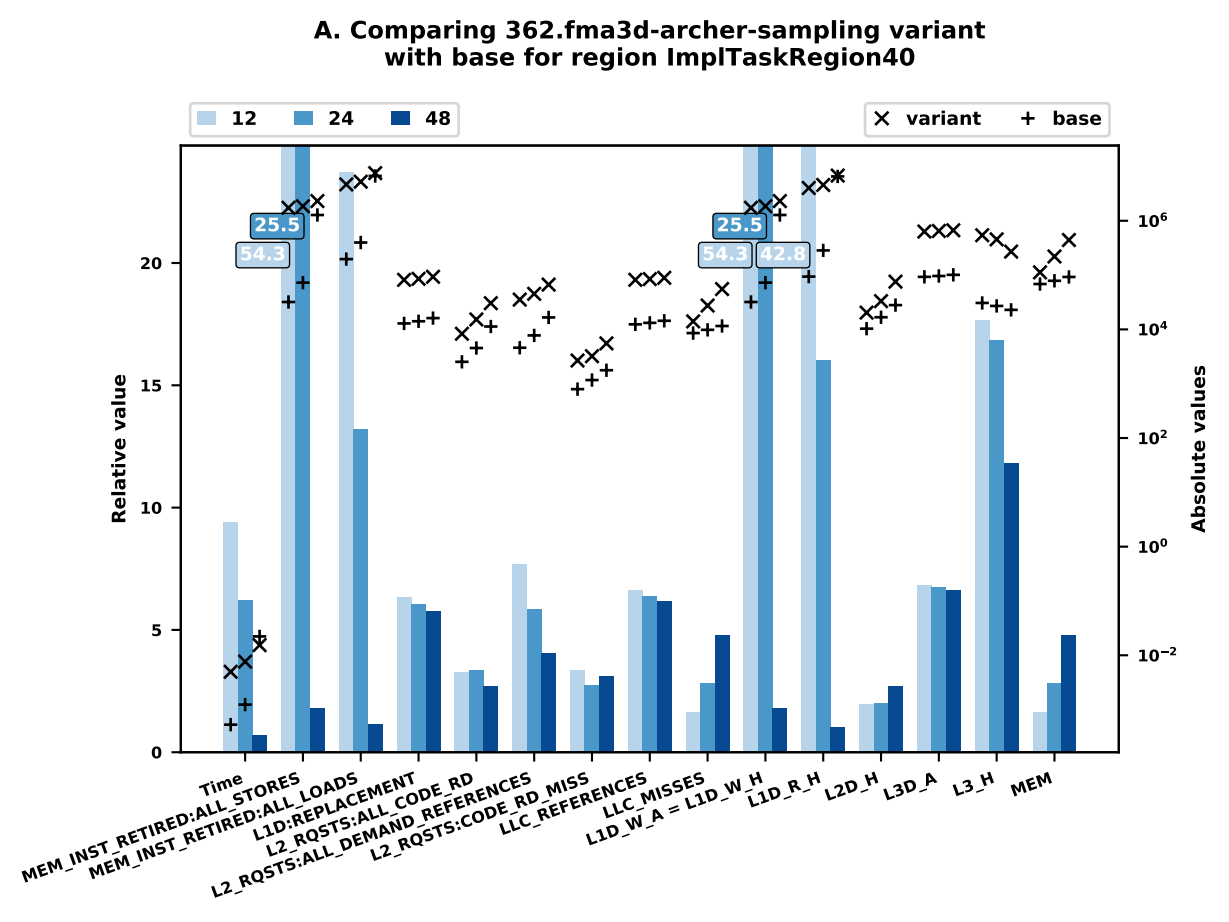

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion39
12
24
48
variant
base
Relative value
Absolute values
23.7
22.9
22.2
22.2
25.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

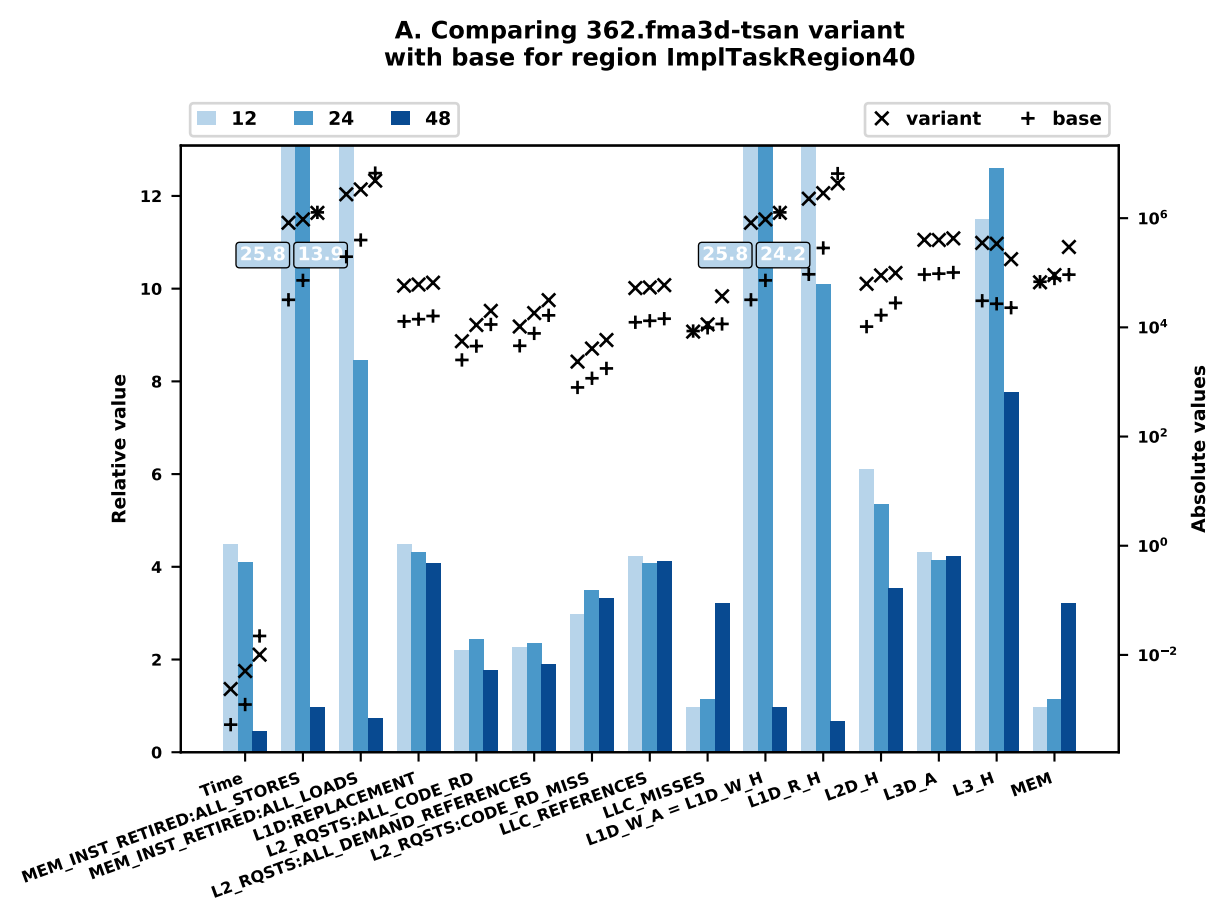

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion39
12
24
48
variant
base
16.1
16.2
15.1
25.1
Relative value
Absolute values
0
2
4
6
8
10
12
14
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
10^{9}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

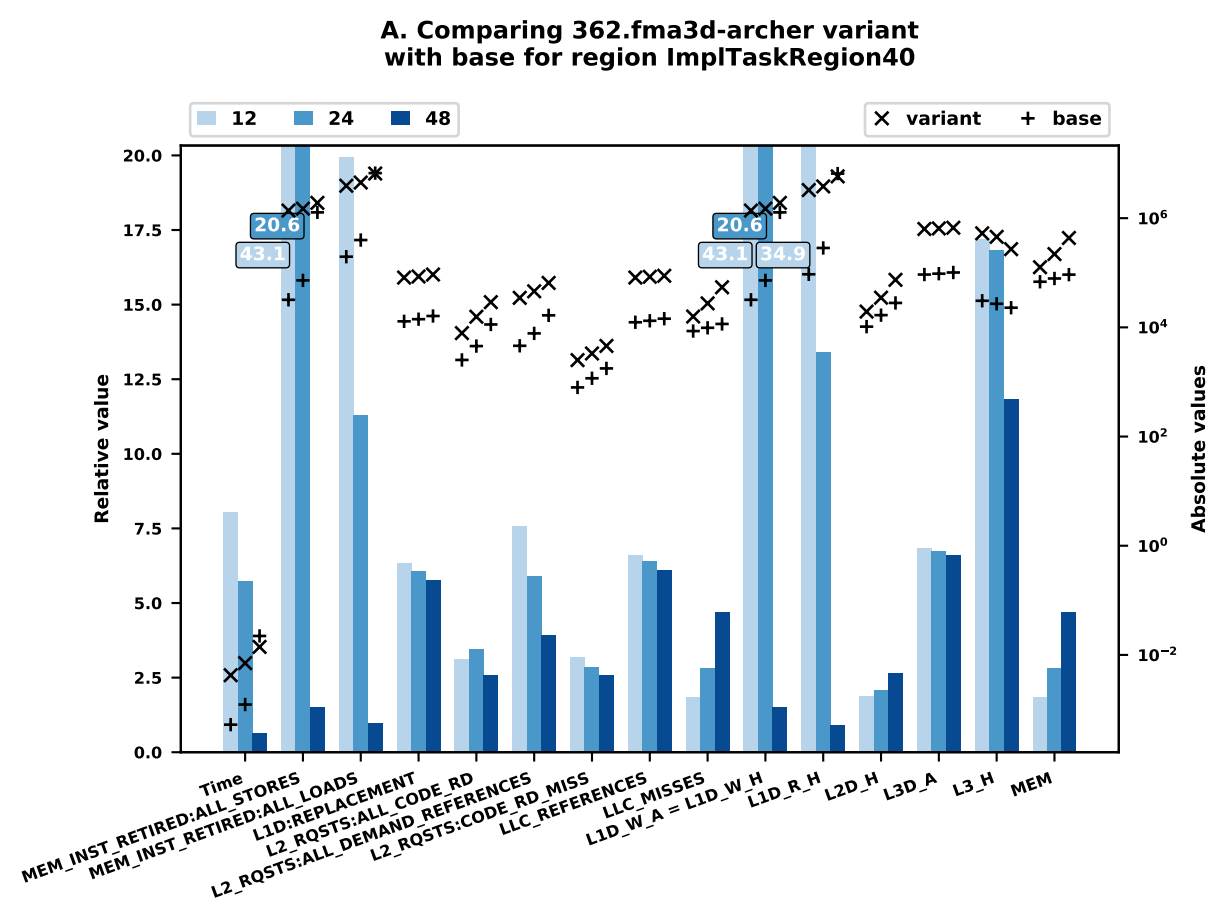

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion40
12
24
48
variant
base
Relative value
Absolute values
25.6
13.8
25.6
24.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

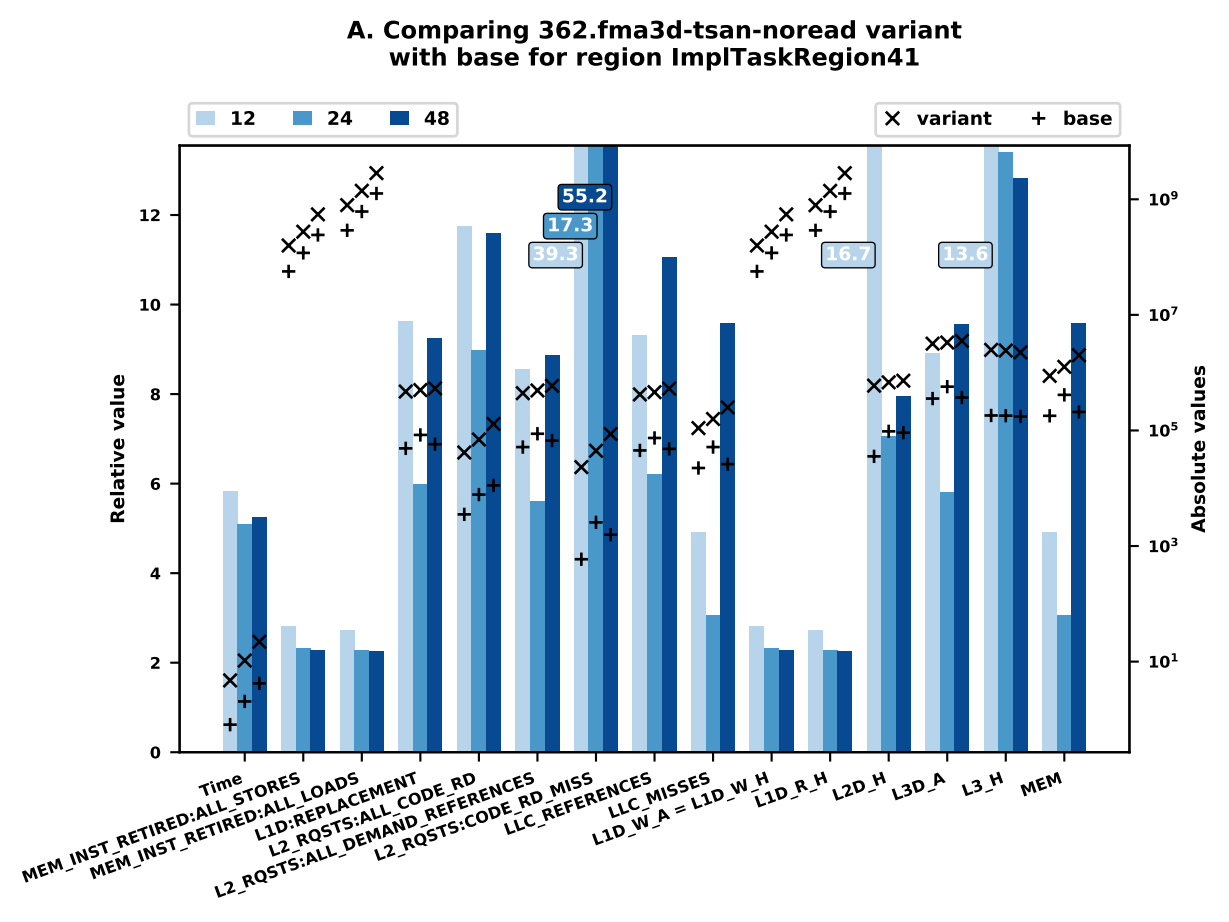

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion40
12
24
48
variant
base
Relative value
Absolute values
20.6
43.4
20.6
43.4
35.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

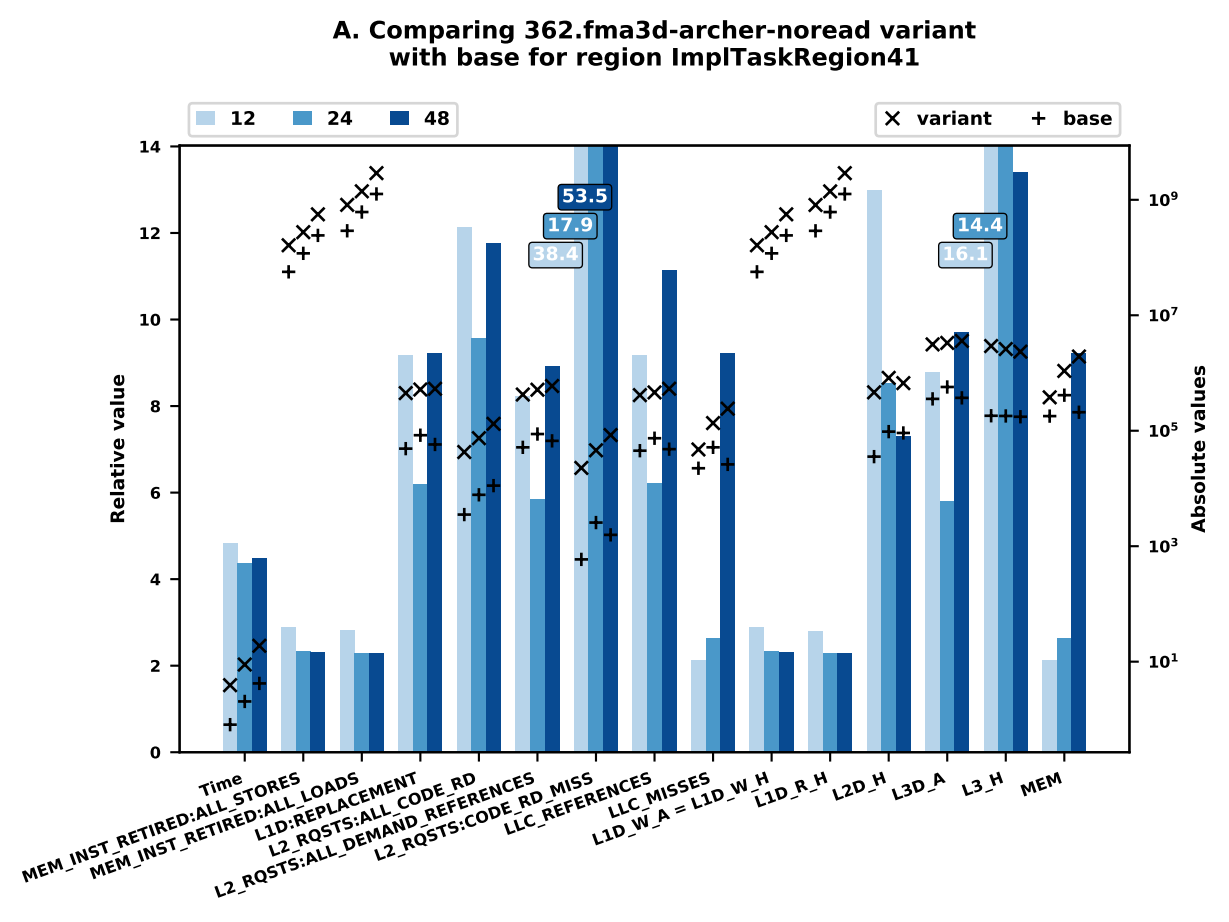

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion40
12
24
48
variant
base
Relative value
Absolute values
17.9
37.1
17.9
37.1
28.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

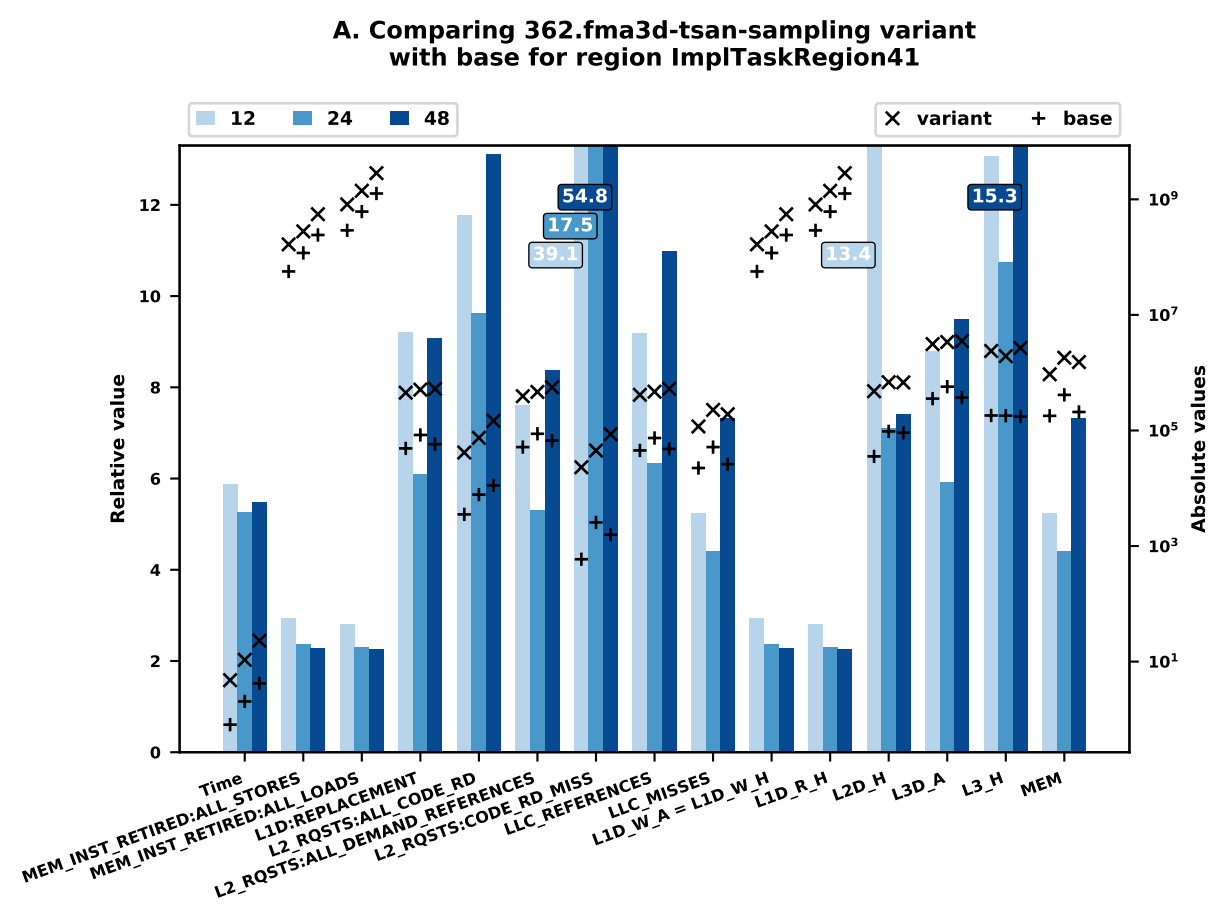

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion40
12
24
48
variant
base
Relative value
Absolute values
25.5
54.3
25.5
54.3
42.8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

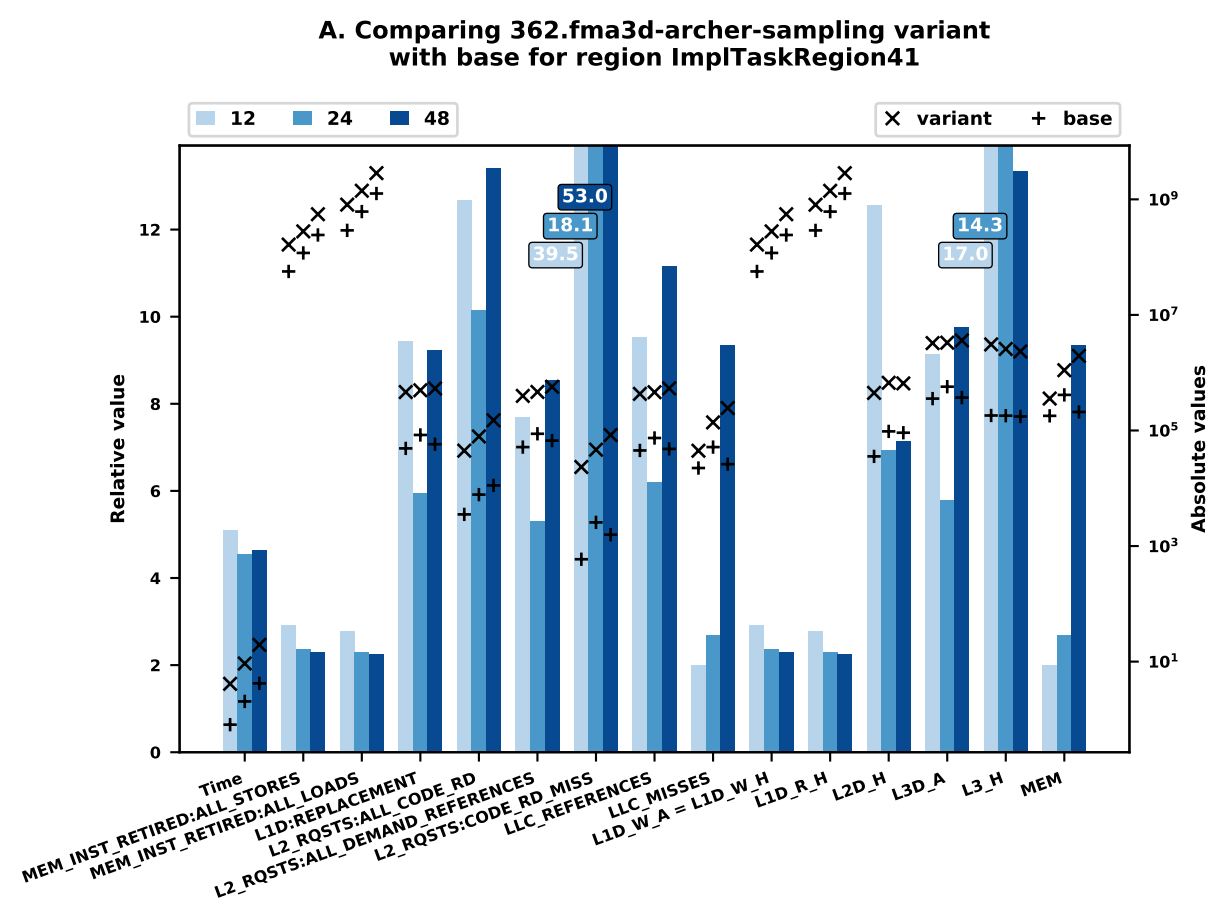

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion40
12
24
48
variant
base
Relative value
Absolute values
25.8
13.9
25.8
24.2
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

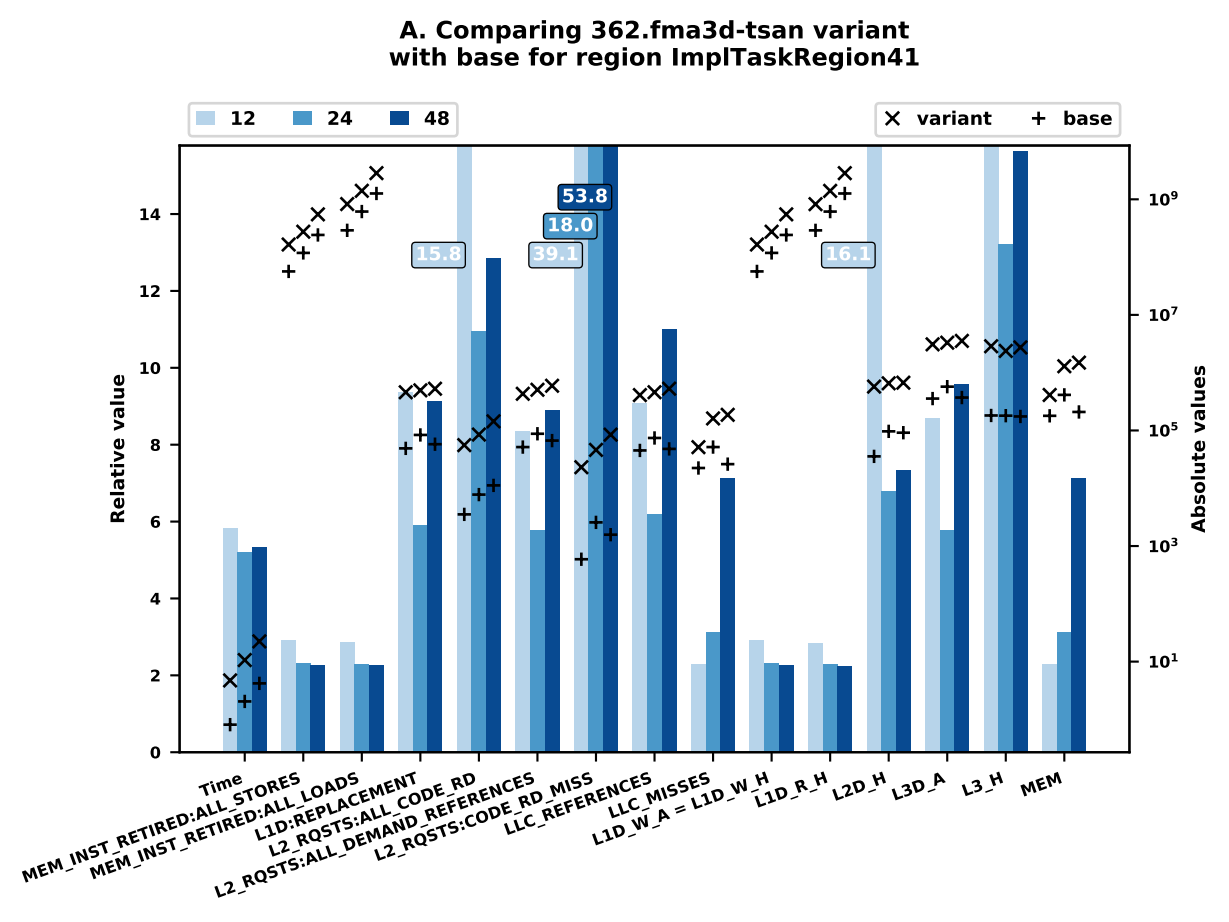

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion40
12
24
48
variant
base
Relative value
Absolute values
20.6
43.1
20.6
43.1
34.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

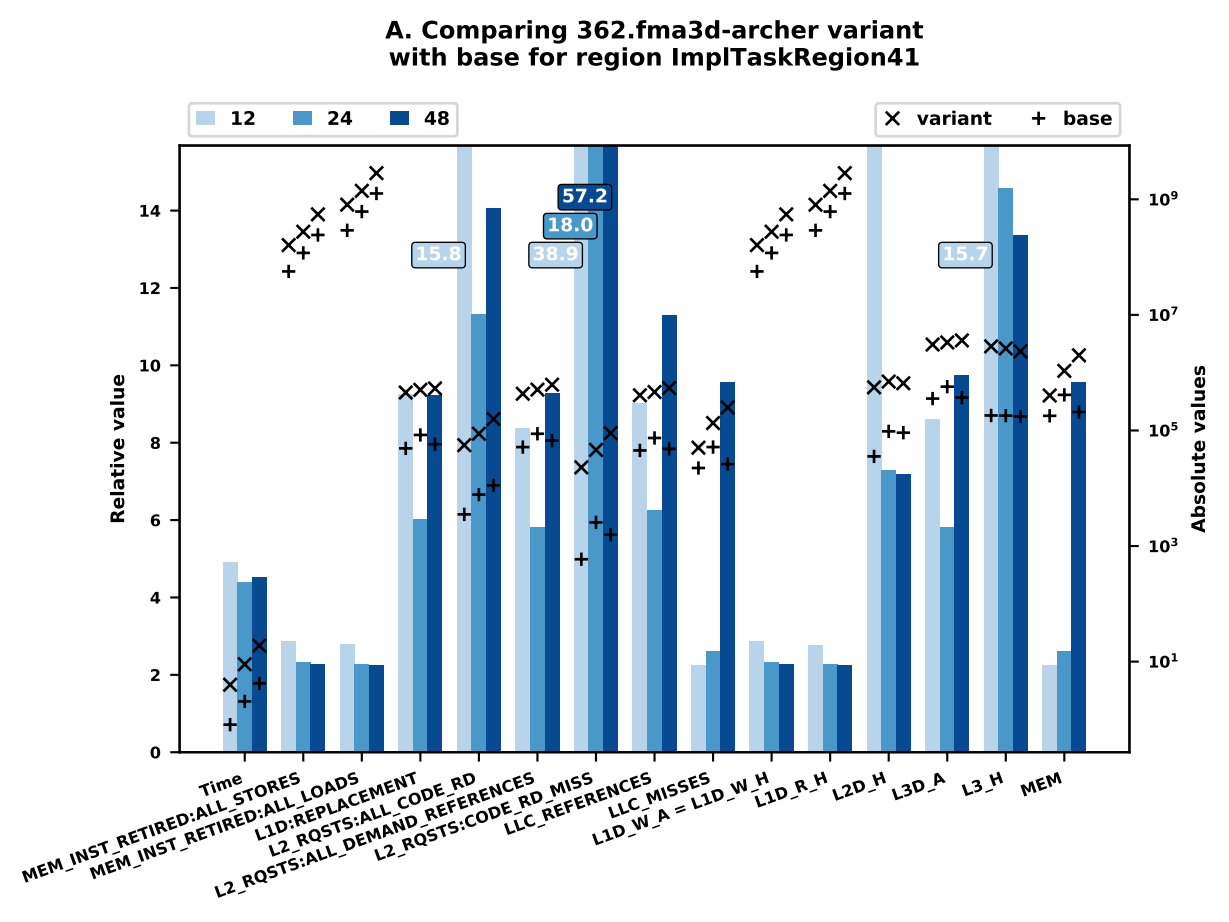

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion41
12
24
48
variant
base
Relative value
Absolute values
55.2
17.3
39.3
16.7
13.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

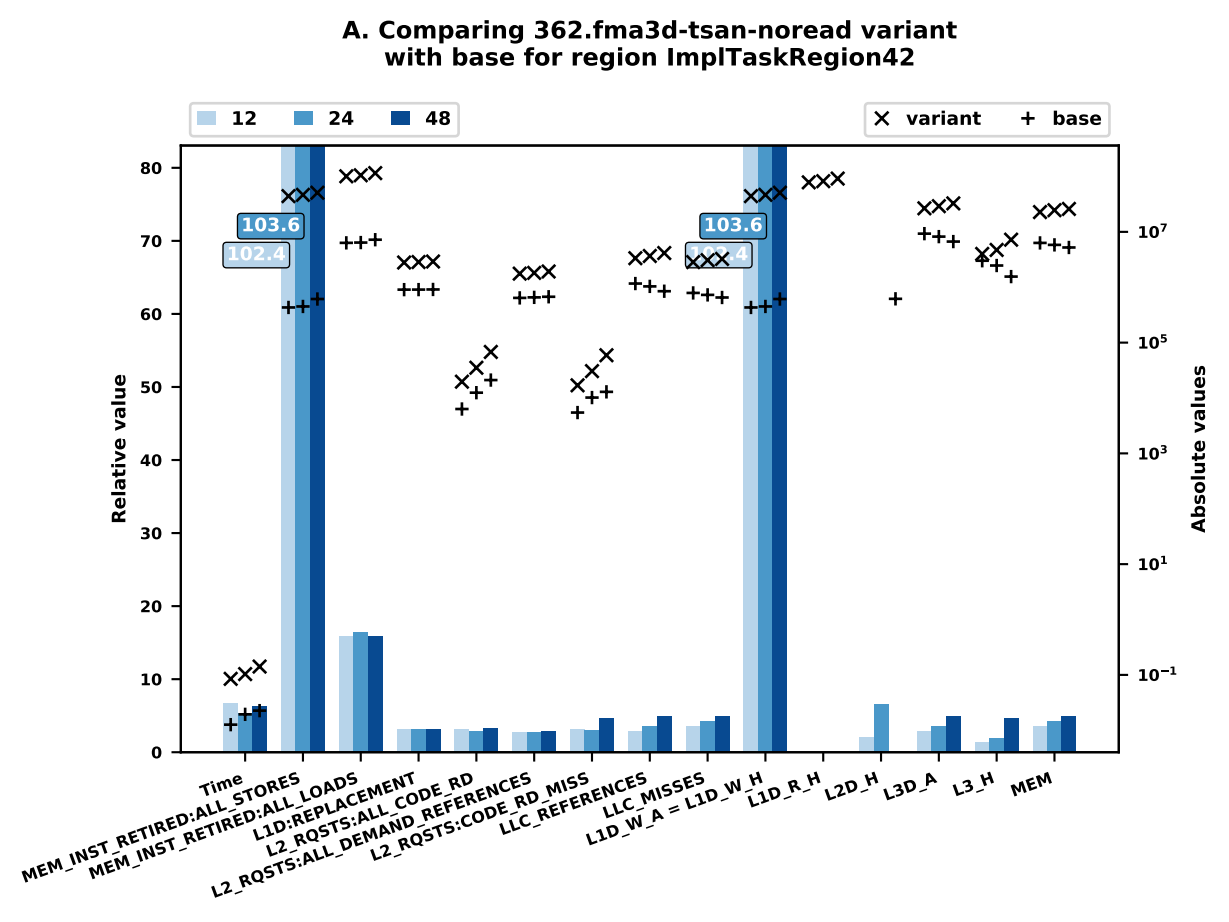

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion41
12
24
48
variant
base
Relative value
Absolute values
0
2
4
6
8
10
12
14
10^1
10^3
10^5
10^7
10^9
53.5
17.9
38.4
14.4
16.1
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

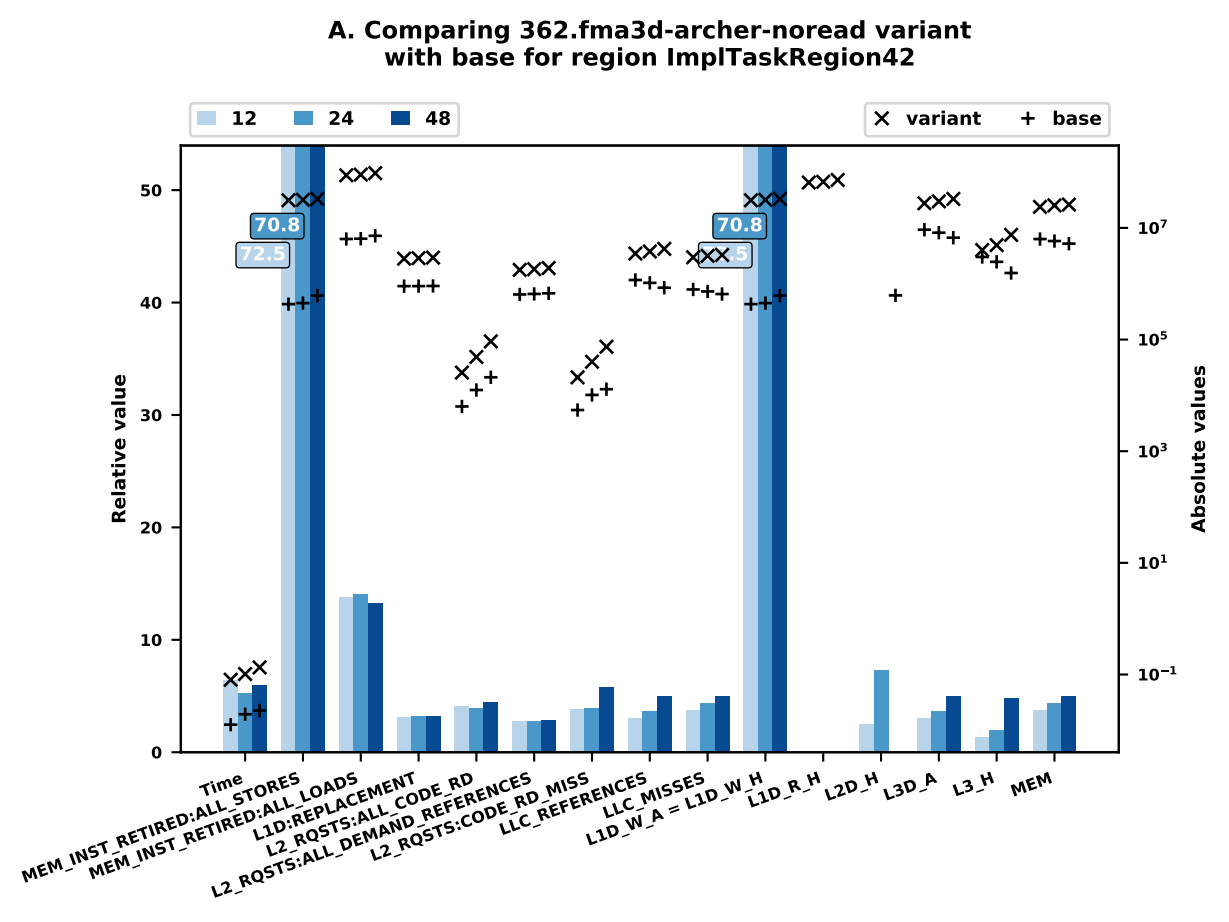

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion41
12
24
48
variant
base
Relative value
Absolute values
0
2
4
6
8
10
12
10^1
10^3
10^5
10^7
10^9
54.8
17.5
39.1
13.4
15.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

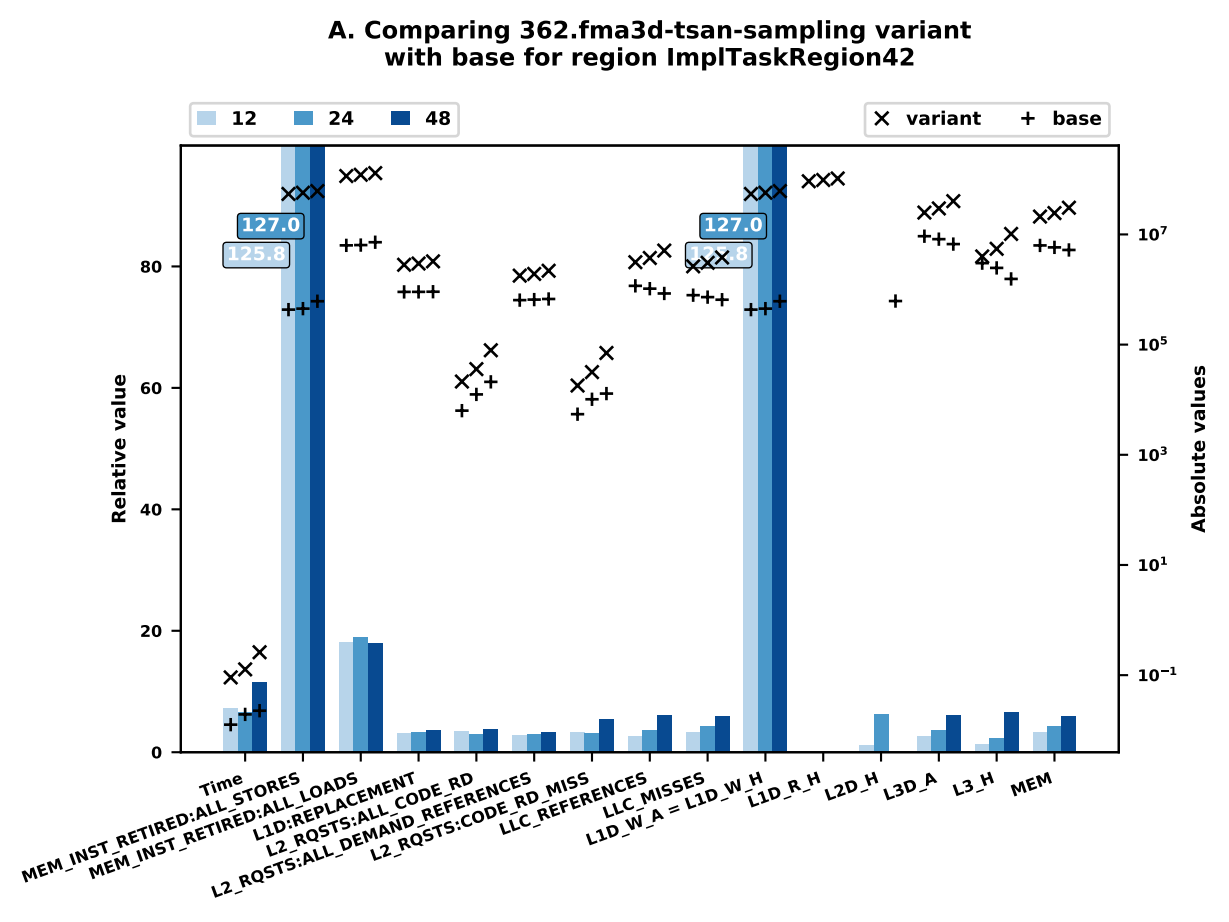

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion41
12
24
48
variant
base
Relative value
Absolute values
0
2
4
6
8
10
12
10^1
10^3
10^5
10^7
10^9
53.0
18.1
39.5
14.3
17.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

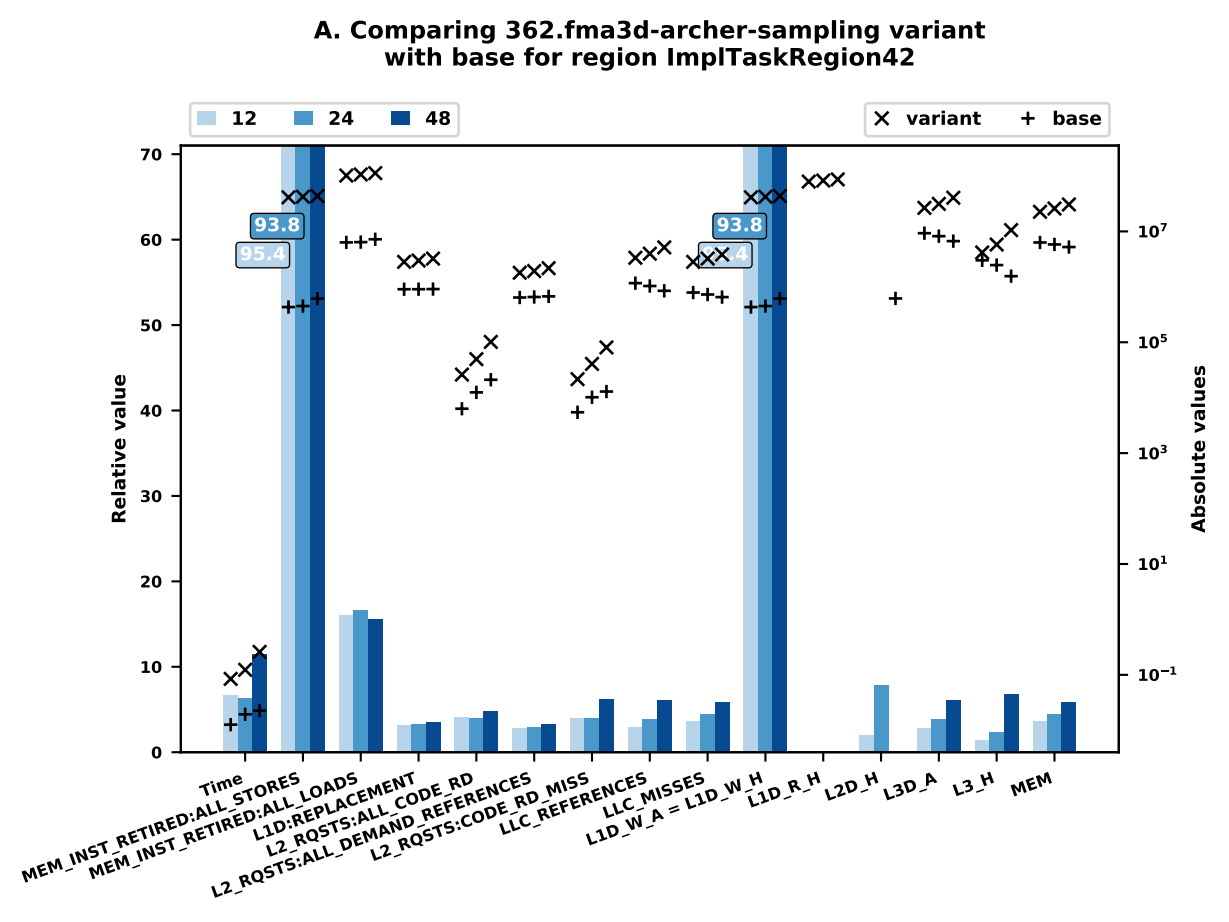

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion41
12
24
48
variant
base
Relative value
Absolute values
15.8
39.1
53.8
18.0
16.1
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

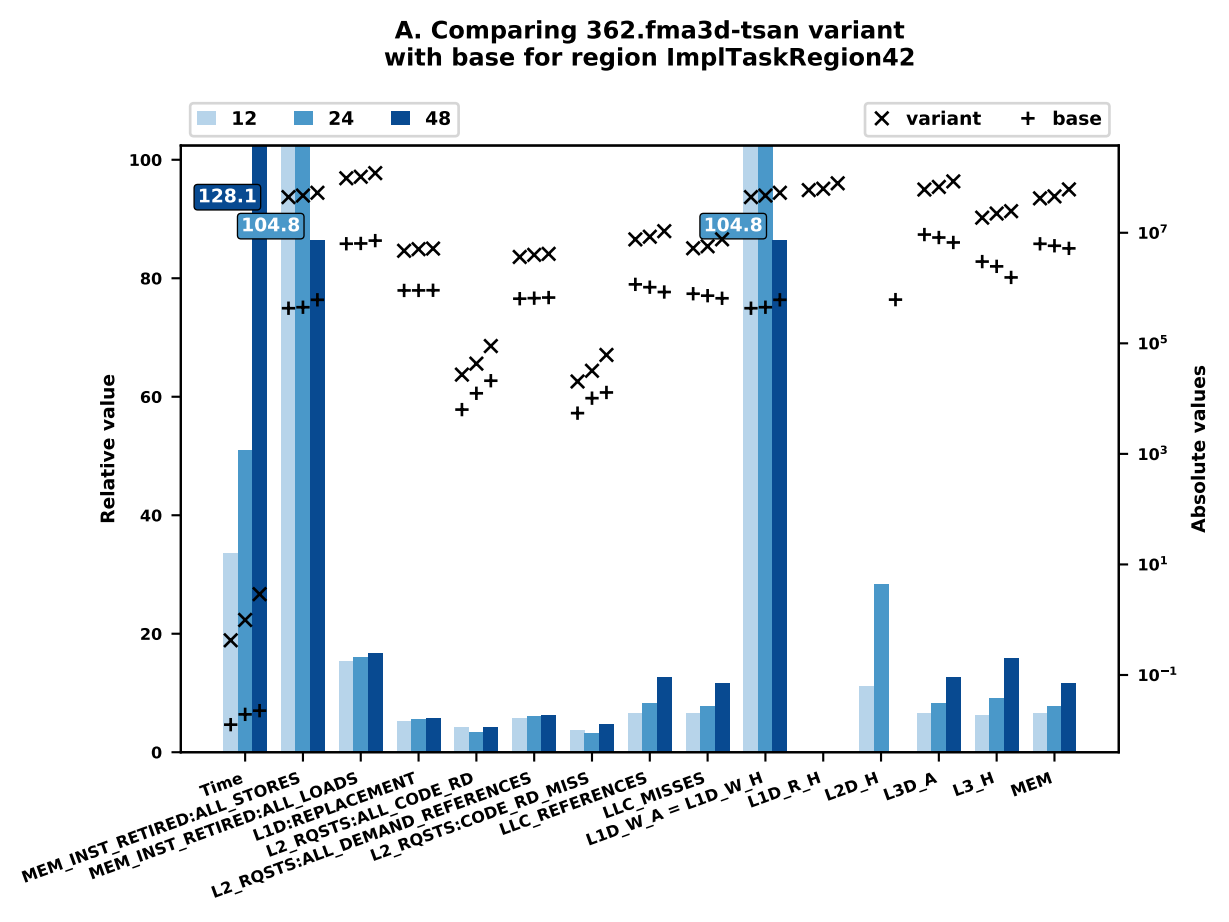

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion41
12
24
48
variant
base
Relative value
Absolute values
0
2
4
6
8
10
12
14
10^1
10^3
10^5
10^7
10^9
15.8
38.9
57.2
18.0
15.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

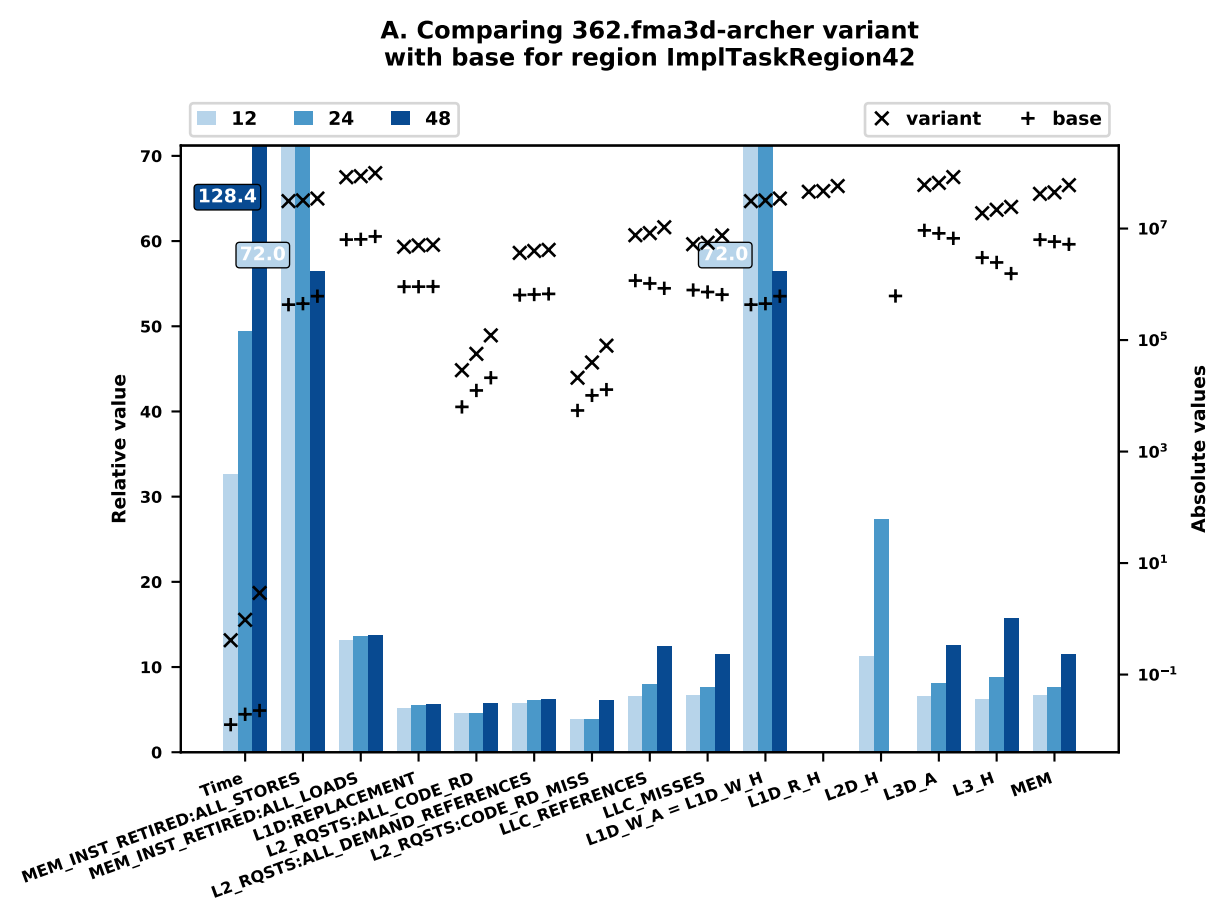

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion42
12
24
48
variant
base
Relative value
Absolute values
103.6
102.4
103.6
102.4
0
10
20
30
40
50
60
70
80
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

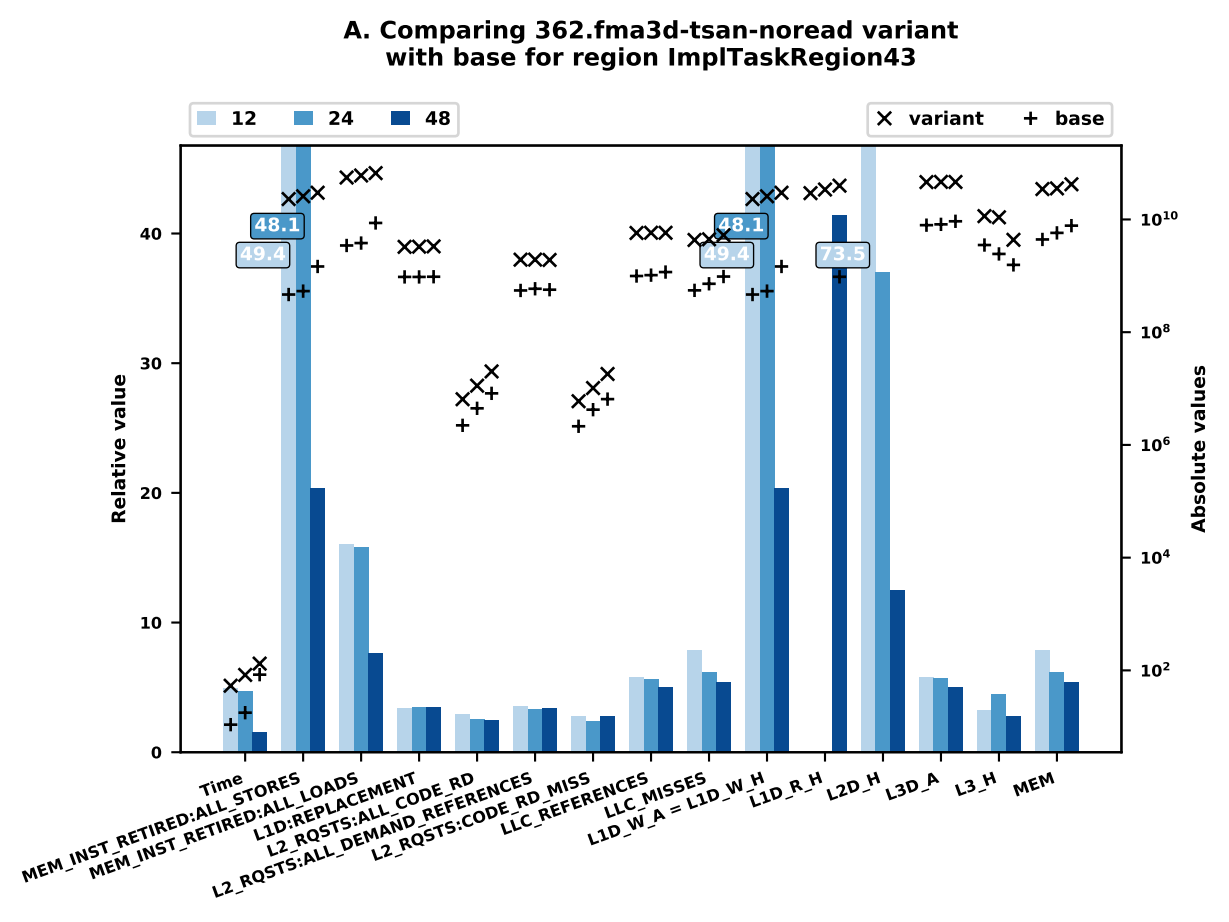

A. Comparing 362.fma3d-archer-noread variant with base for region ImplTaskRegion42
12
24
48
variant
base
Relative value
Absolute values
70.8
72.5
70.8
72.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

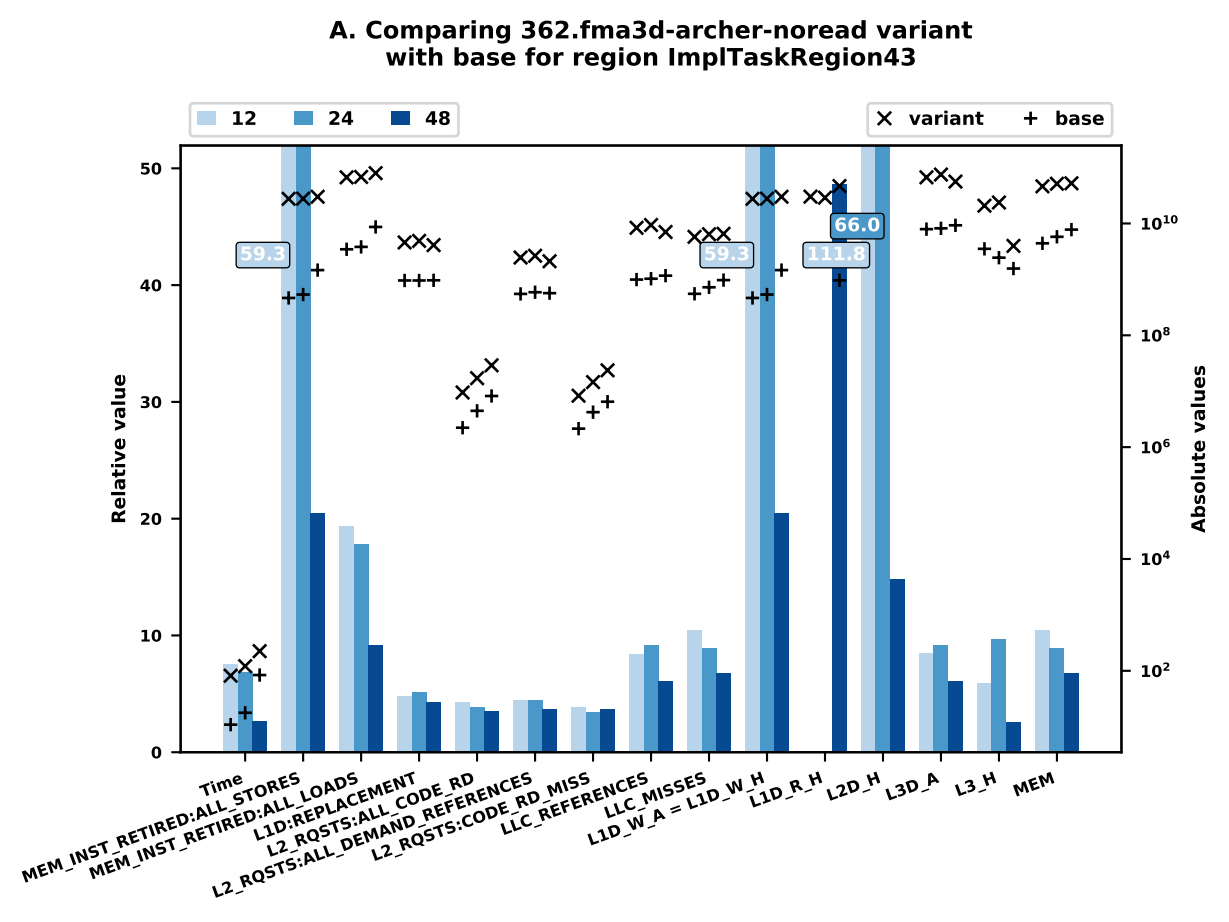

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion42
12
24
48
variant
base
127.0
125.8
127.0
125.8
Relative value
Absolute values
0
20
40
60
80
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

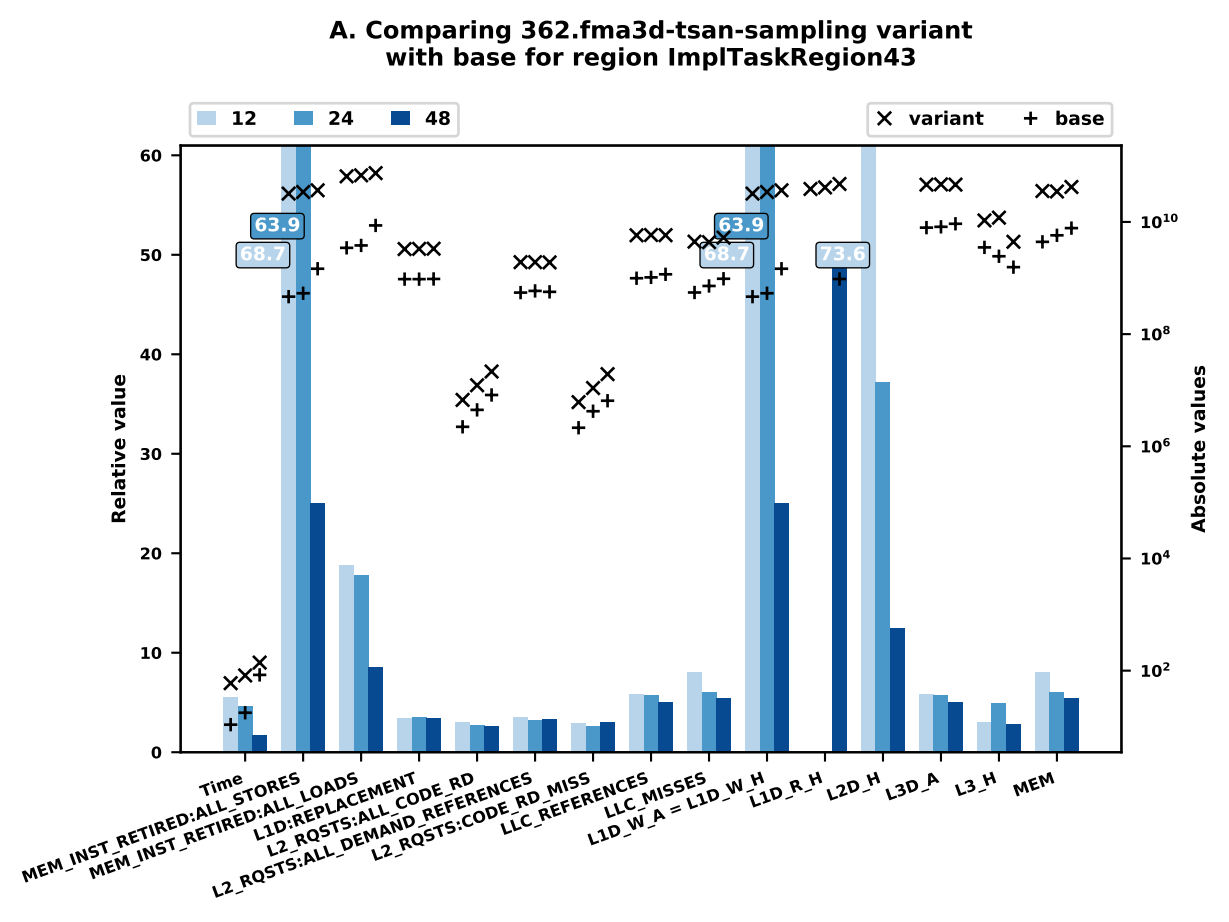

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion42
12
24
48
variant
base
Relative value
Absolute values
93.8
95.4
93.8
95.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

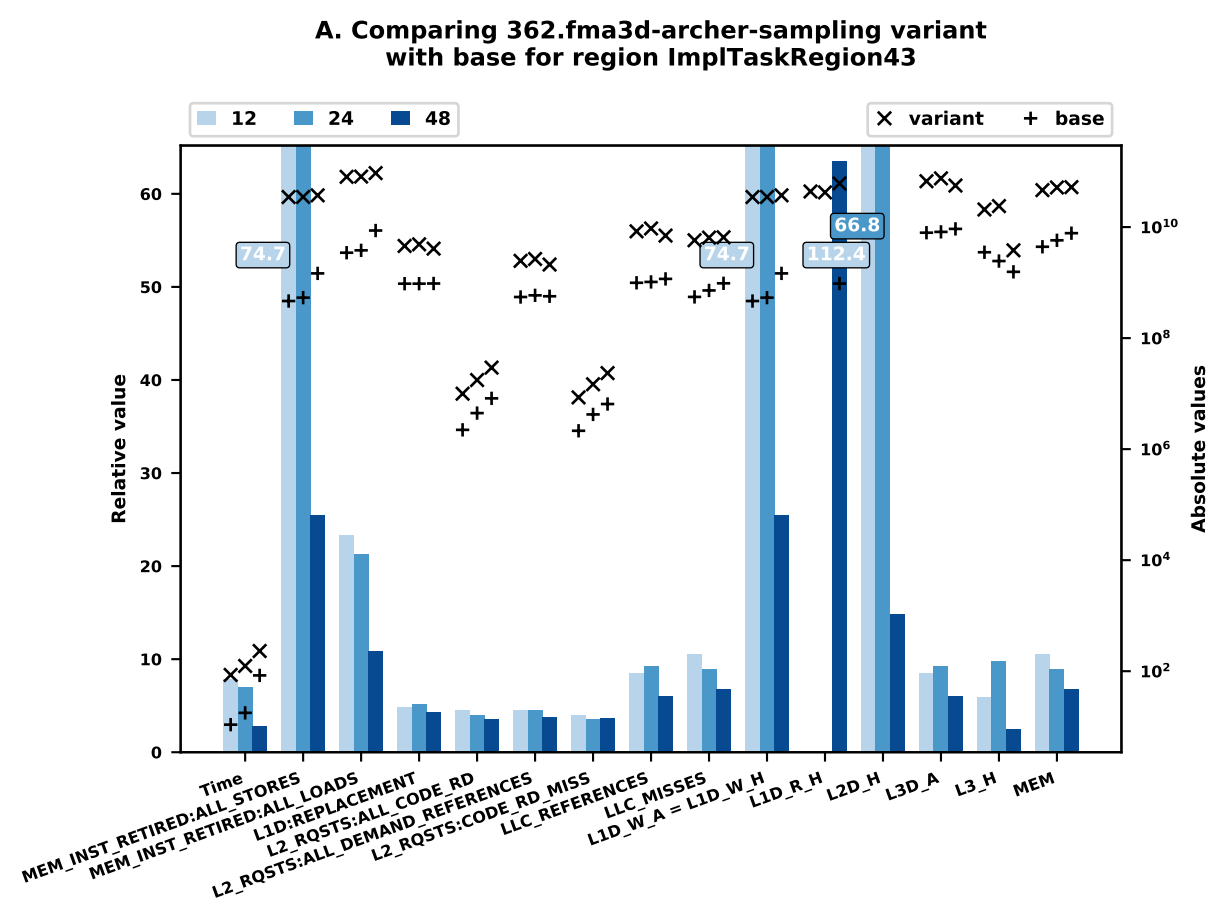

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion42
12
24
48
variant
base
128.1
104.8
104.8
Relative value
Absolute values
0
20
40
60
80
100
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

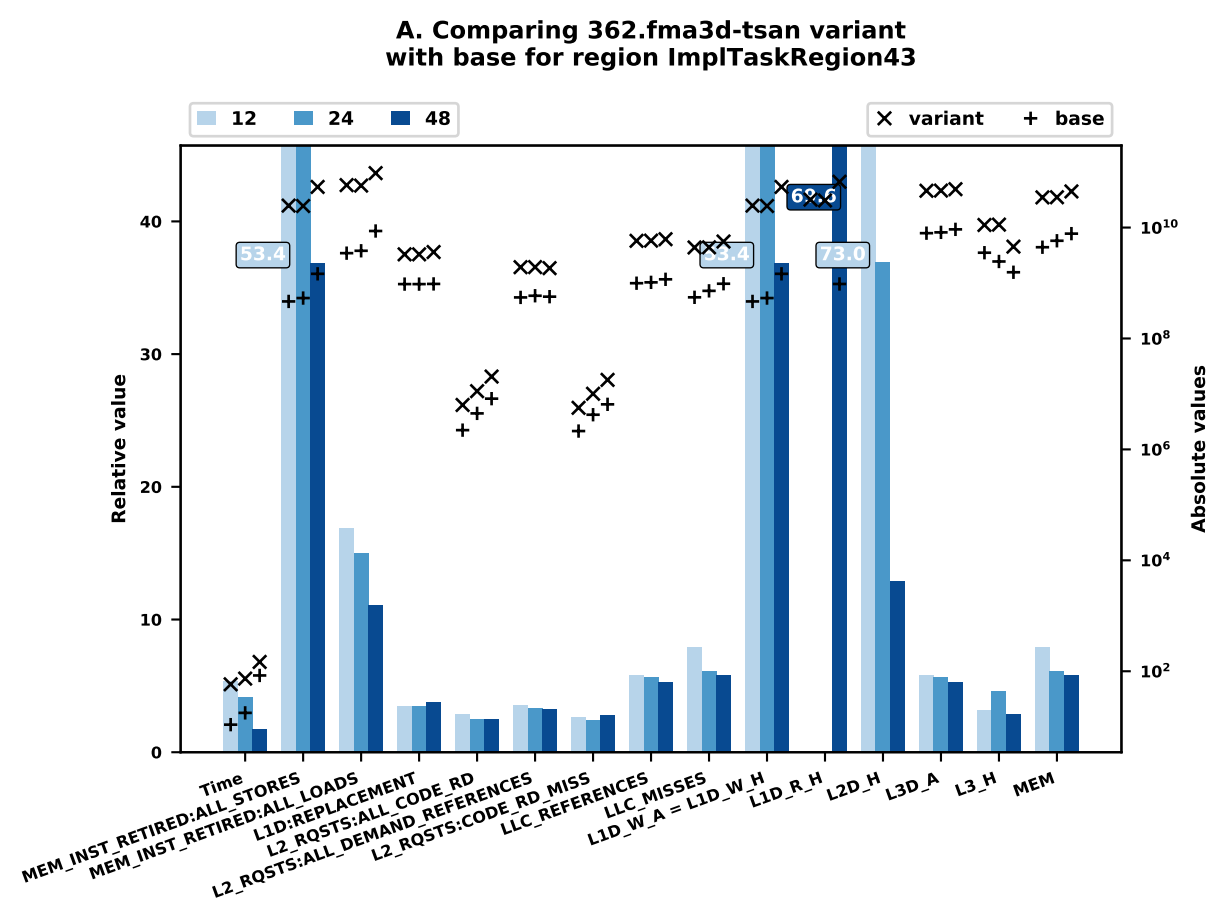

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion42
12
24
48
variant
base
128.4
72.0
72.0
Relative value
Absolute values
0
10
20
30
40
50
60
70
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

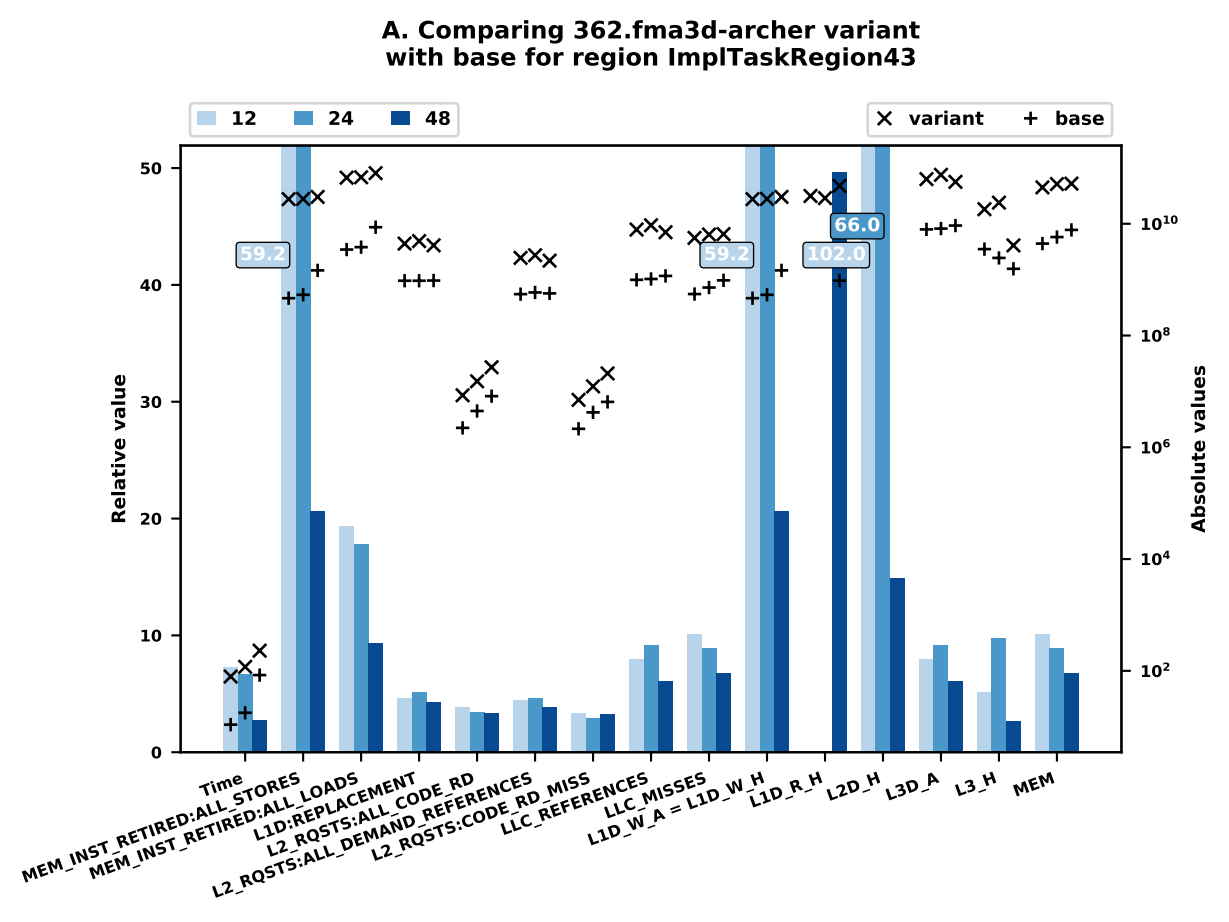

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion43
12
24
48
variant
base
Relative value
Absolute values
0
10
20
30
40
10^{2}
10^{4}
10^{6}
10^{8}
10^{10}
48.1
49.4
48.1
49.4
73.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

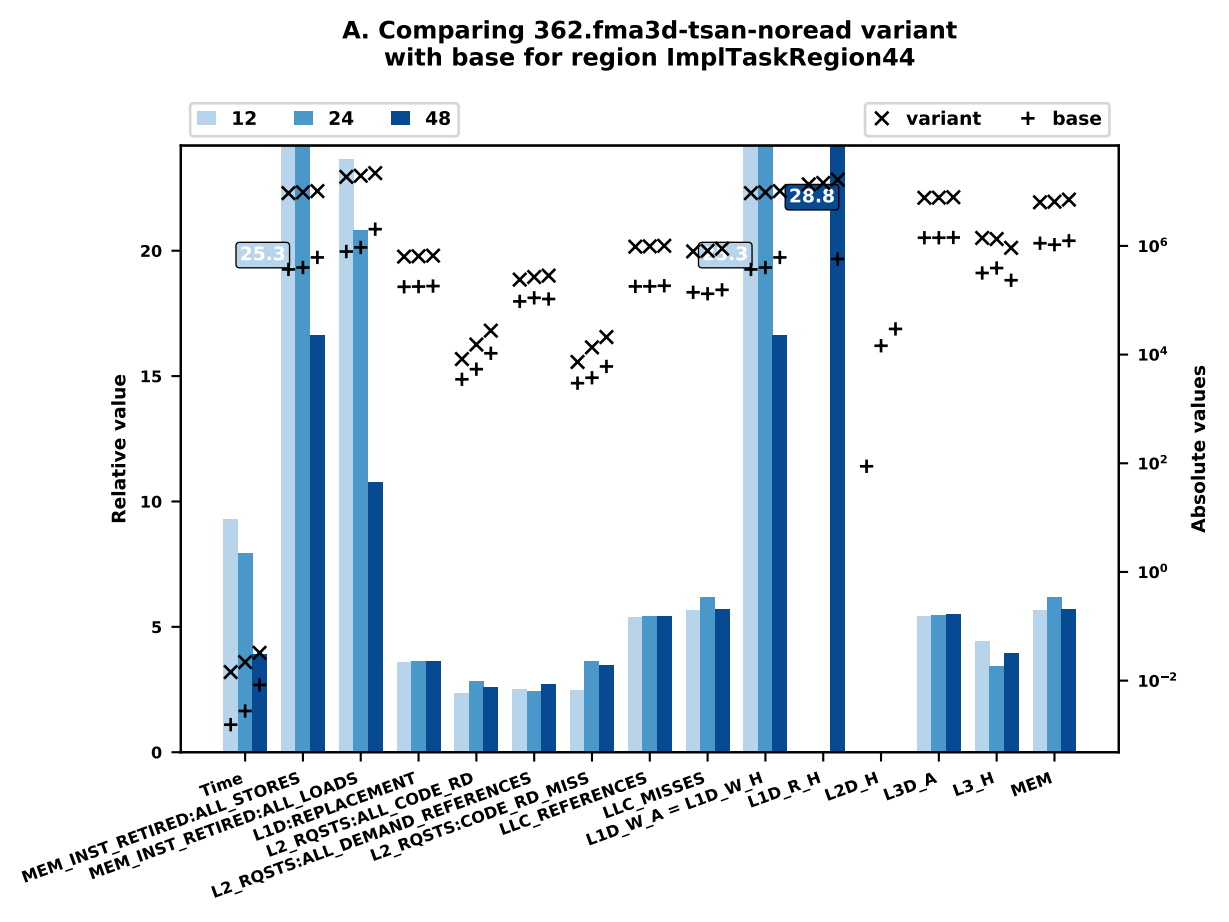

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion43
12
24
48
variant
base
Relative value
Absolute values
59.3
59.3
66.0
111.8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

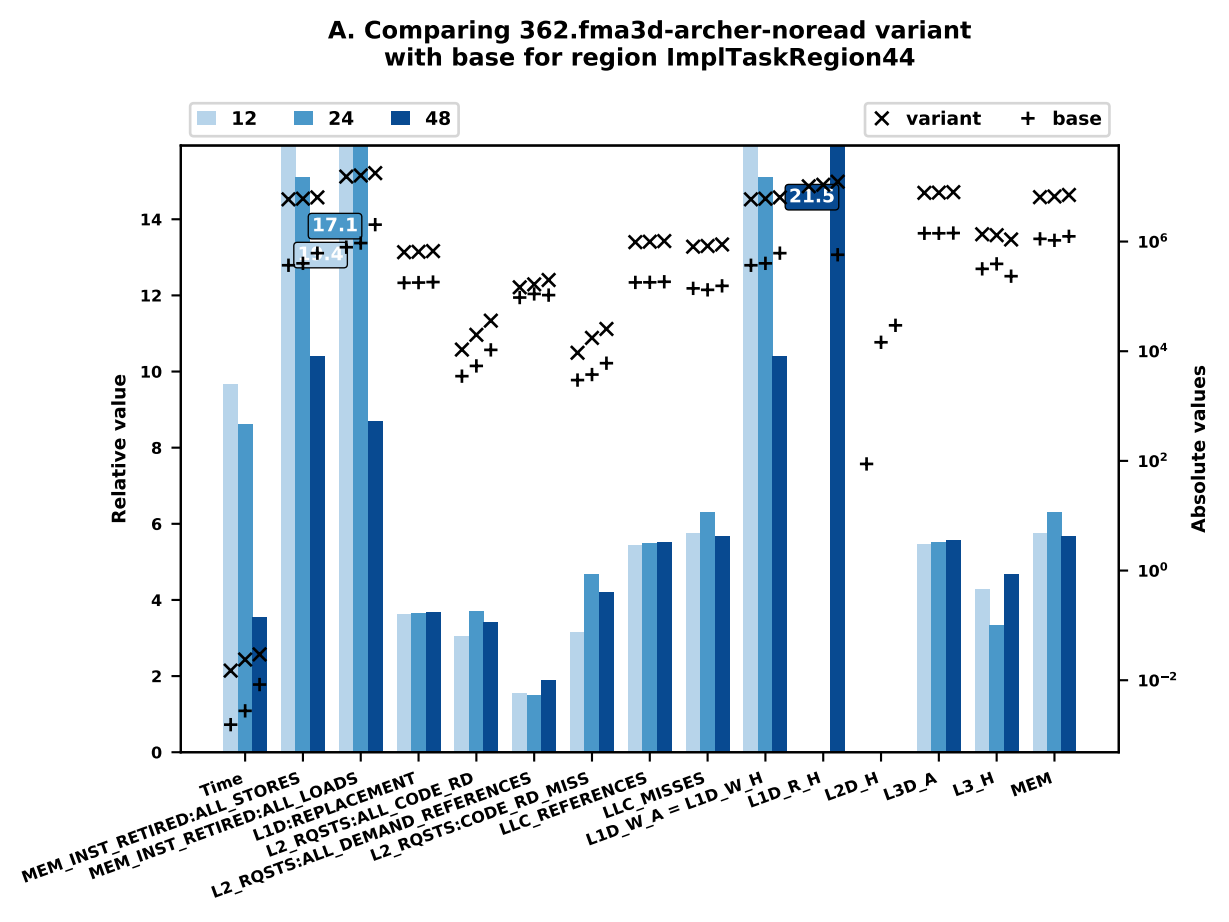

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion43
12
24
48
variant
base
Relative value
Absolute values
63.9
68.7
63.9
68.7
73.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

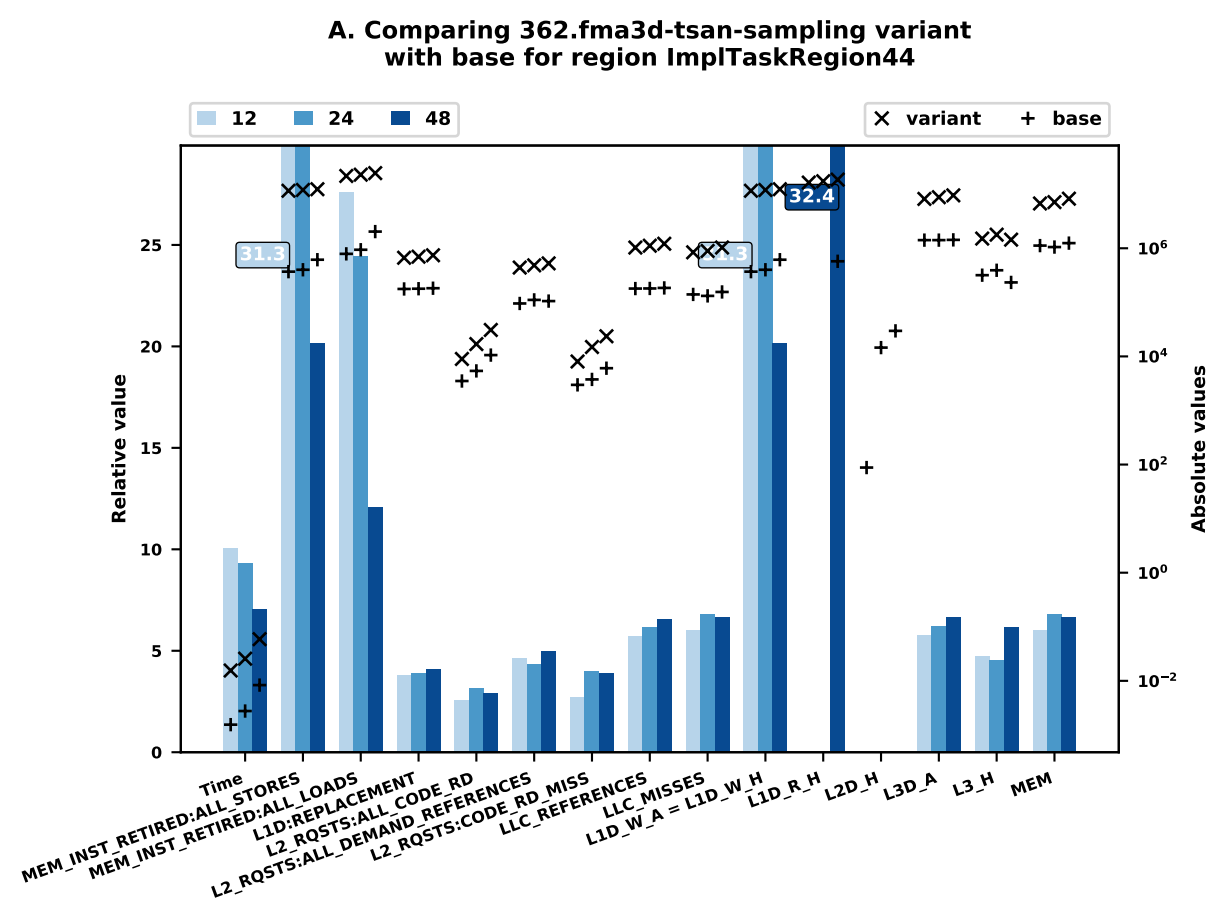

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion43
12
24
48
variant
base
Relative value
Absolute values
74.7
74.7
66.8
112.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

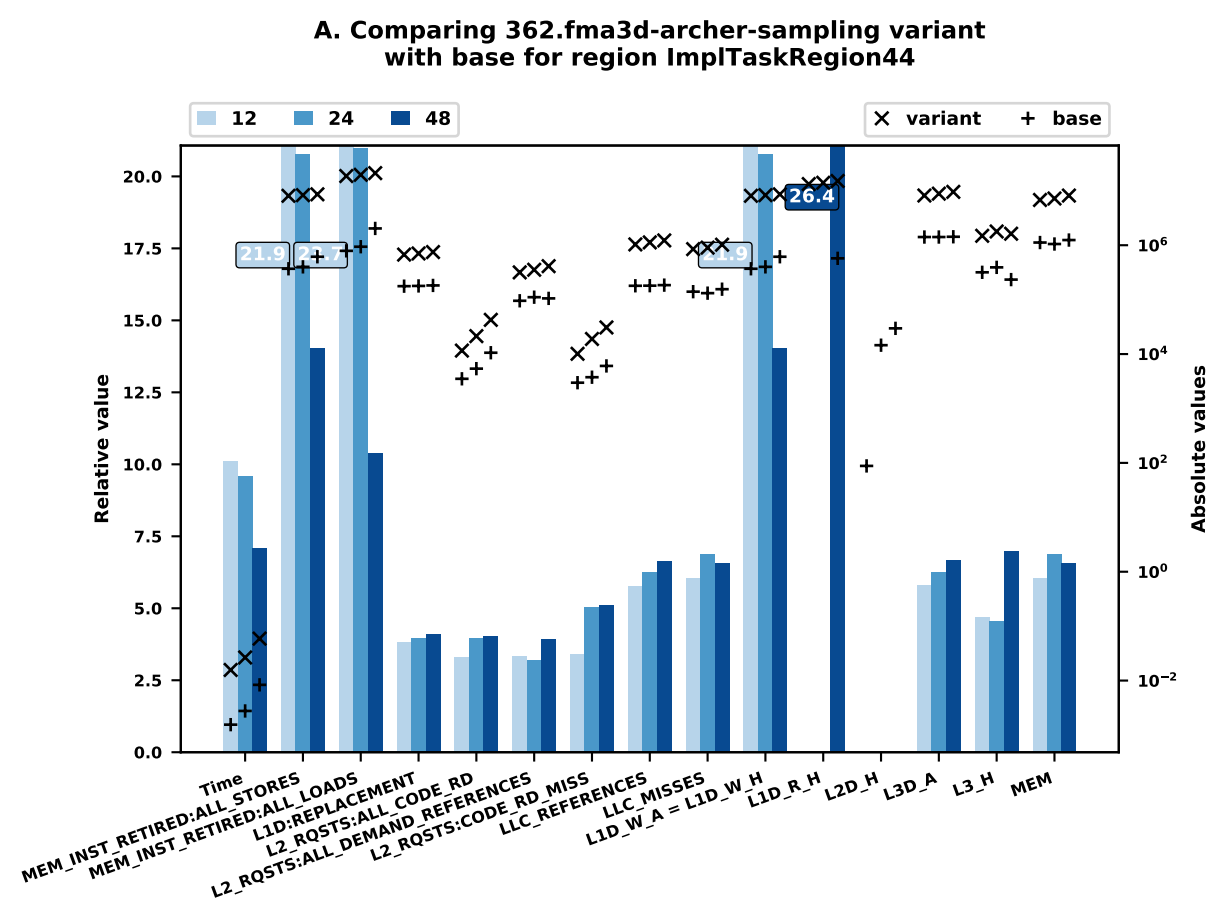

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion43
12
24
48
variant
base
Relative value
Absolute values
0
10
20
30
40
10^{2}
10^{4}
10^{6}
10^{8}
10^{10}
53.4
68.6
53.4
73.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

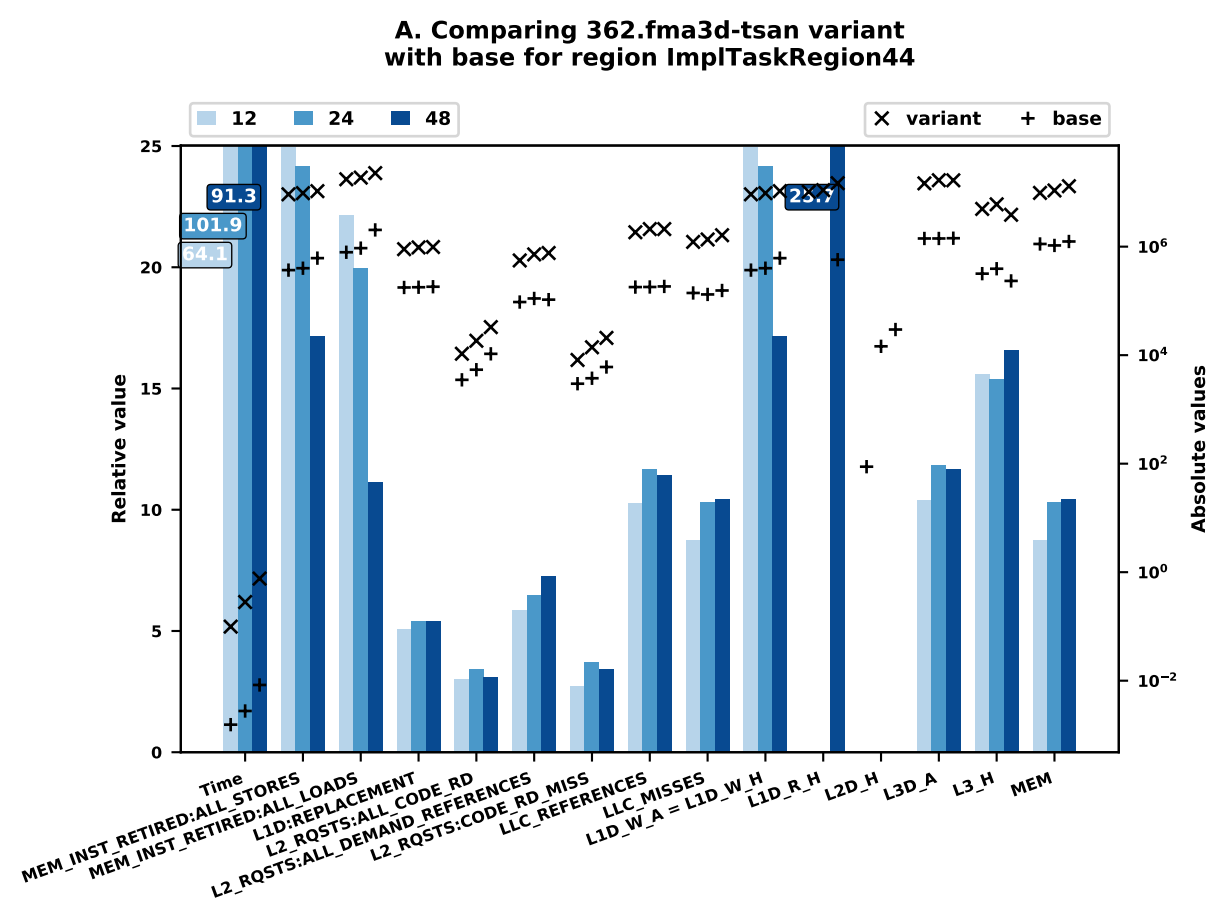

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion43
12
24
48
variant
base
Relative value
Absolute values
59.2
59.2
66.0
102.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

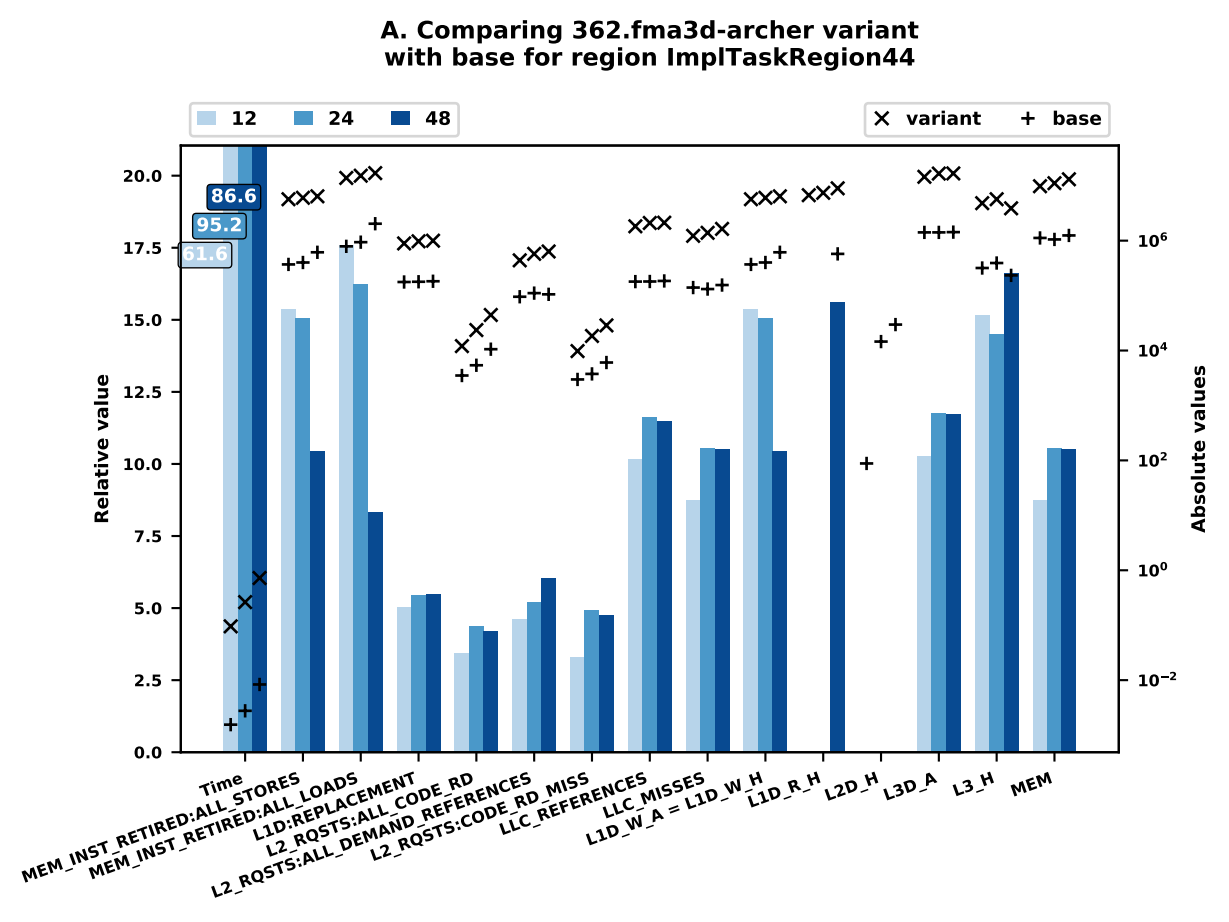

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion44
12
24
48
variant
base
Relative value
Absolute values
25.3
28.8
0
5
10
15
20
10^{6}
10^{4}
10^{2}
10^{0}
10^{-2}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

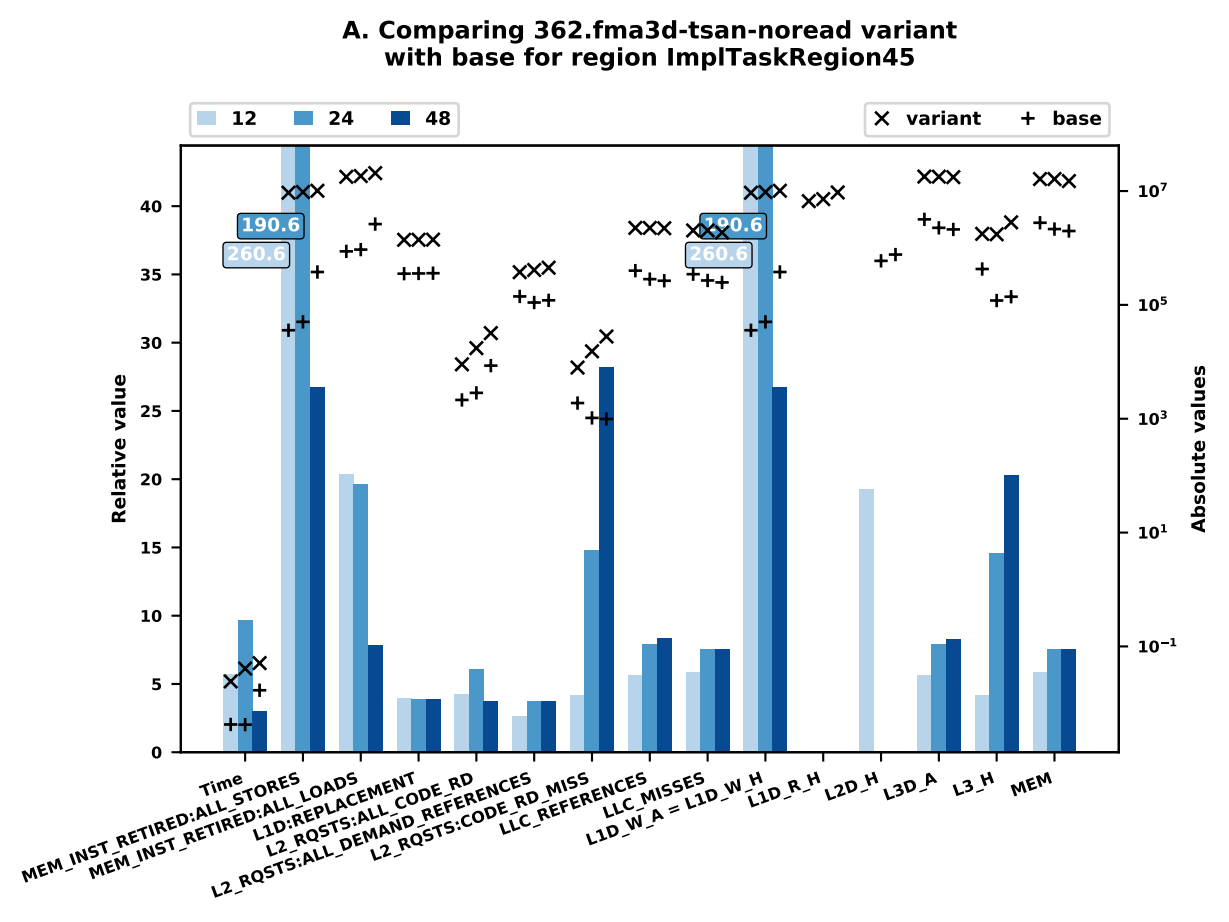

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion44
12
24
48
variant
base
17.1
21.5
Relative value
Absolute values
0
2
4
6
8
10
12
14
10^{-2}
10^{0}
10^{2}
10^{4}
10^{6}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

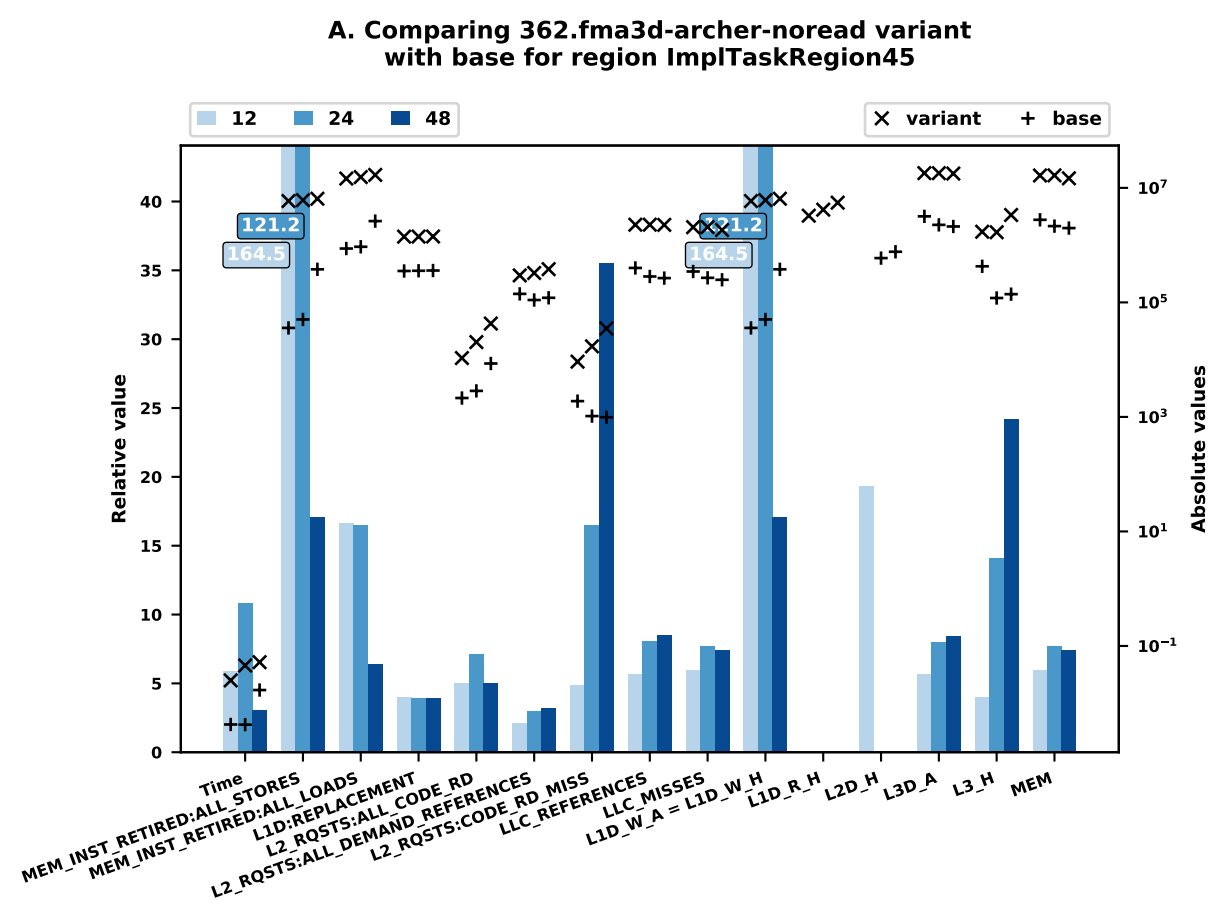

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion44
12
24
48
variant
base
Relative value
Absolute values
0
5
10
15
20
25
10^{-2}
10^{0}
10^{2}
10^{4}
10^{6}
31.3
32.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

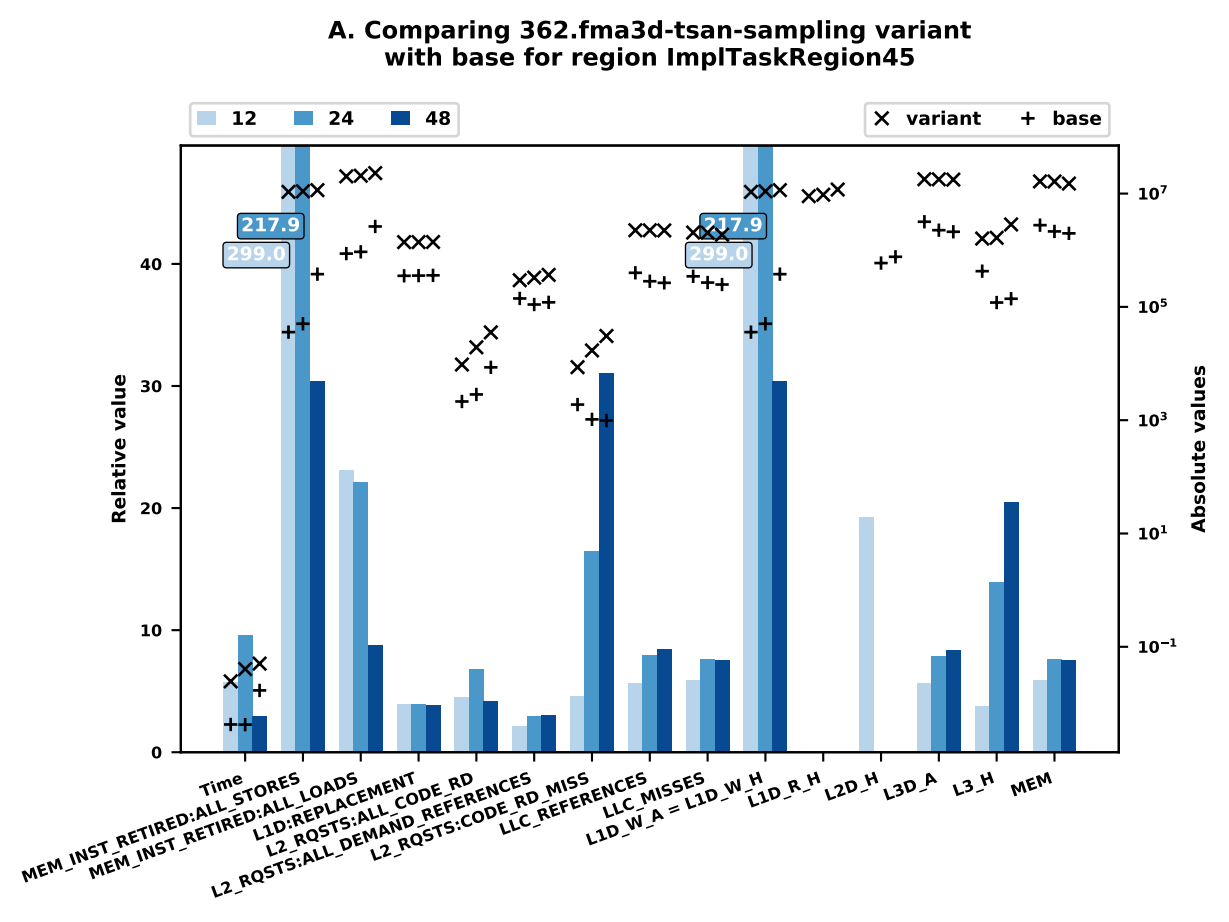

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion44
12
24
48
variant
base
Relative value
Absolute values
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
10^{-2}
10^{0}
10^{2}
10^{4}
10^{6}
21.9
21.9
26.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

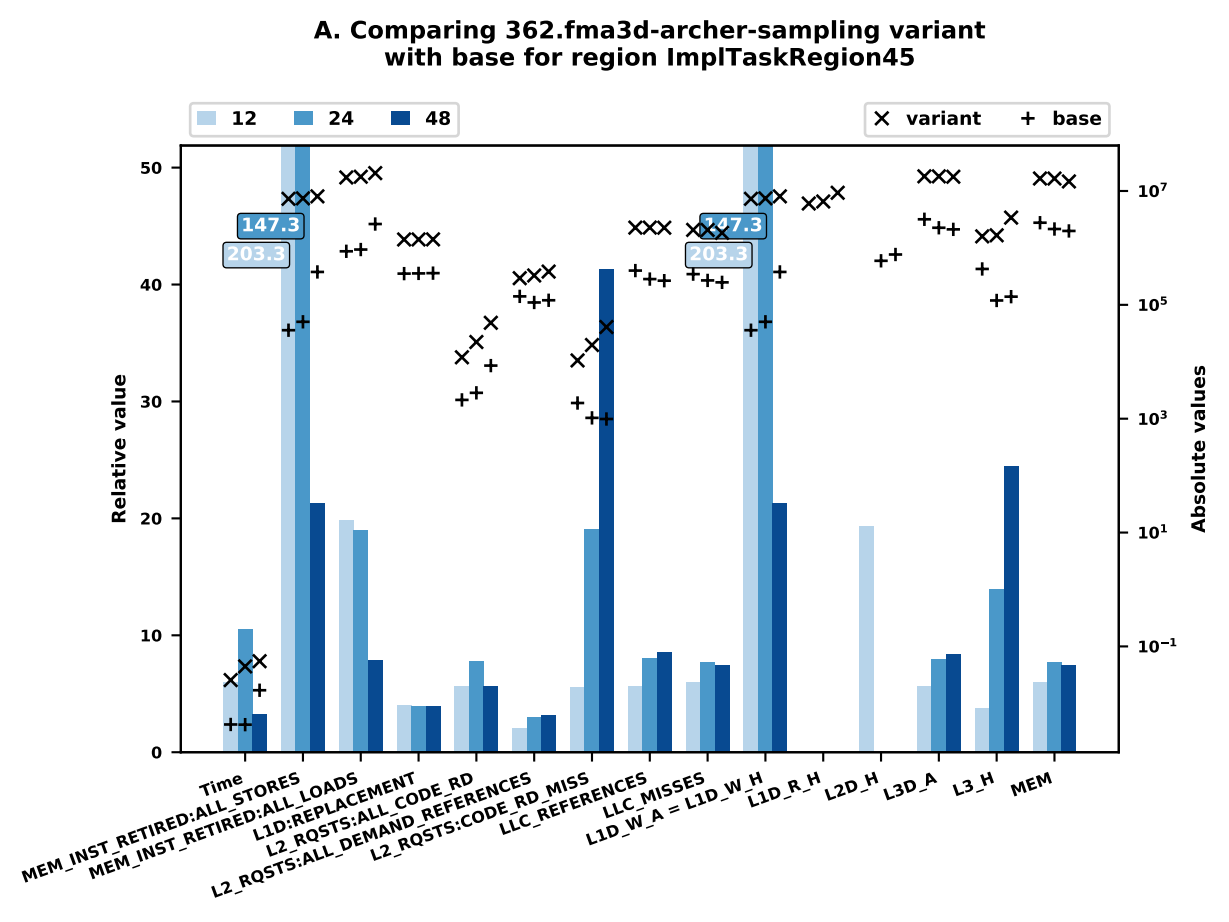

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion44
12
24
48
variant
base
91.3
101.9
64.1
23.7
Relative value
Absolute values
0
5
10
15
20
25
10^{6}
10^{4}
10^{2}
10^{0}
10^{-2}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

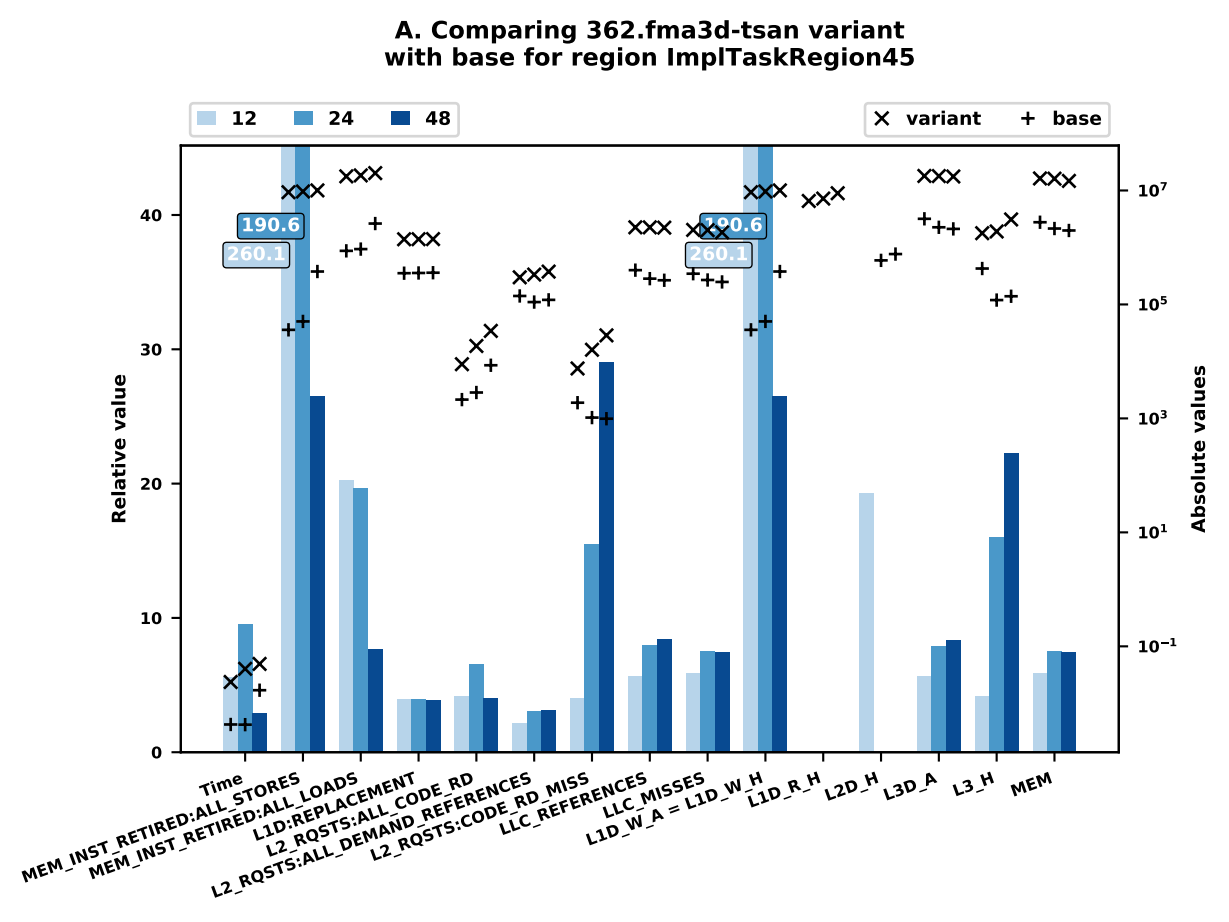

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion44
12
24
48
variant
base
86.6
95.2
61.6
Relative value
Absolute values
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
20.0
10^{-2}
10^{0}
10^{2}
10^{4}
10^{6}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

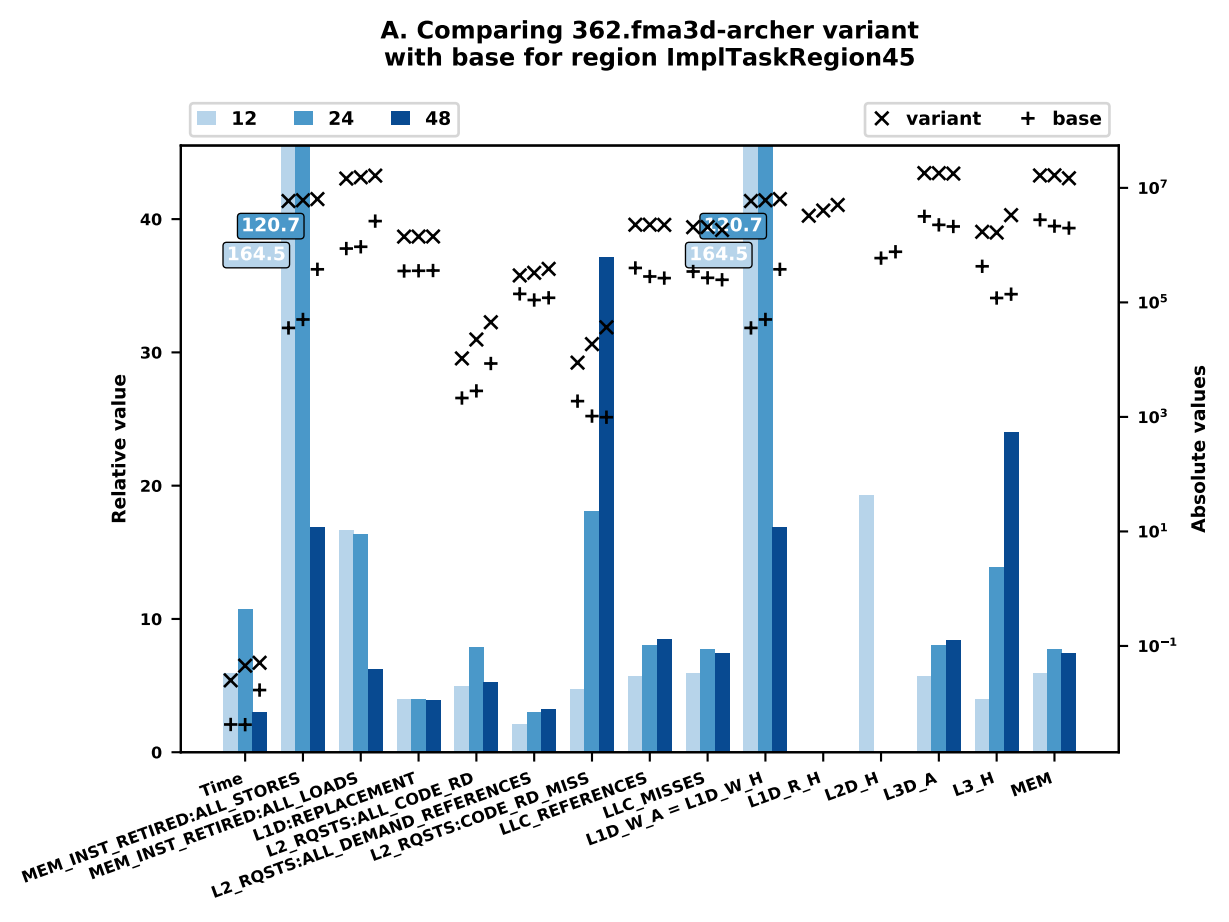

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion45
12
24
48
variant
base
Relative value
Absolute values
190.6
260.6
190.6
260.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

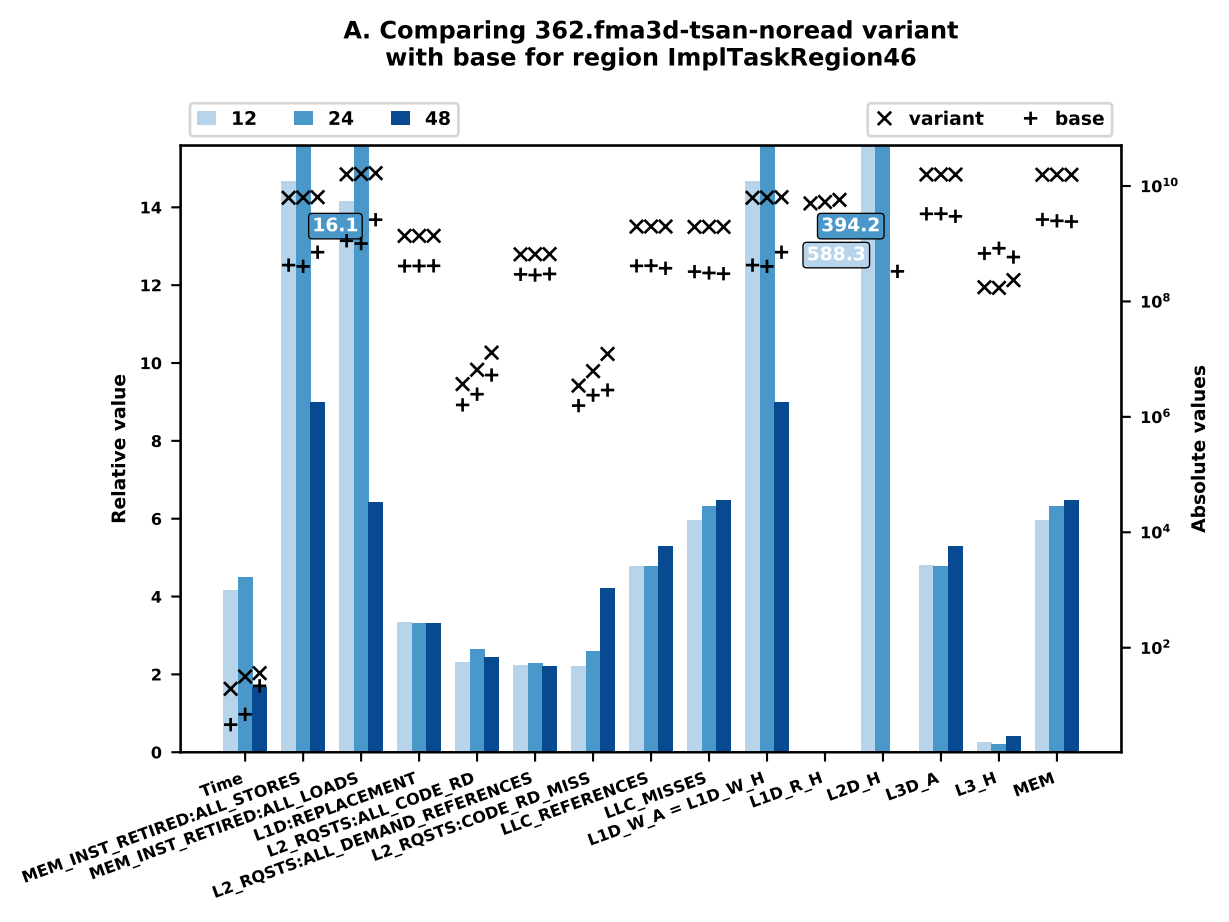

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion45
12
24
48
variant
base
Relative value
Absolute values
121.2
164.5
121.2
164.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

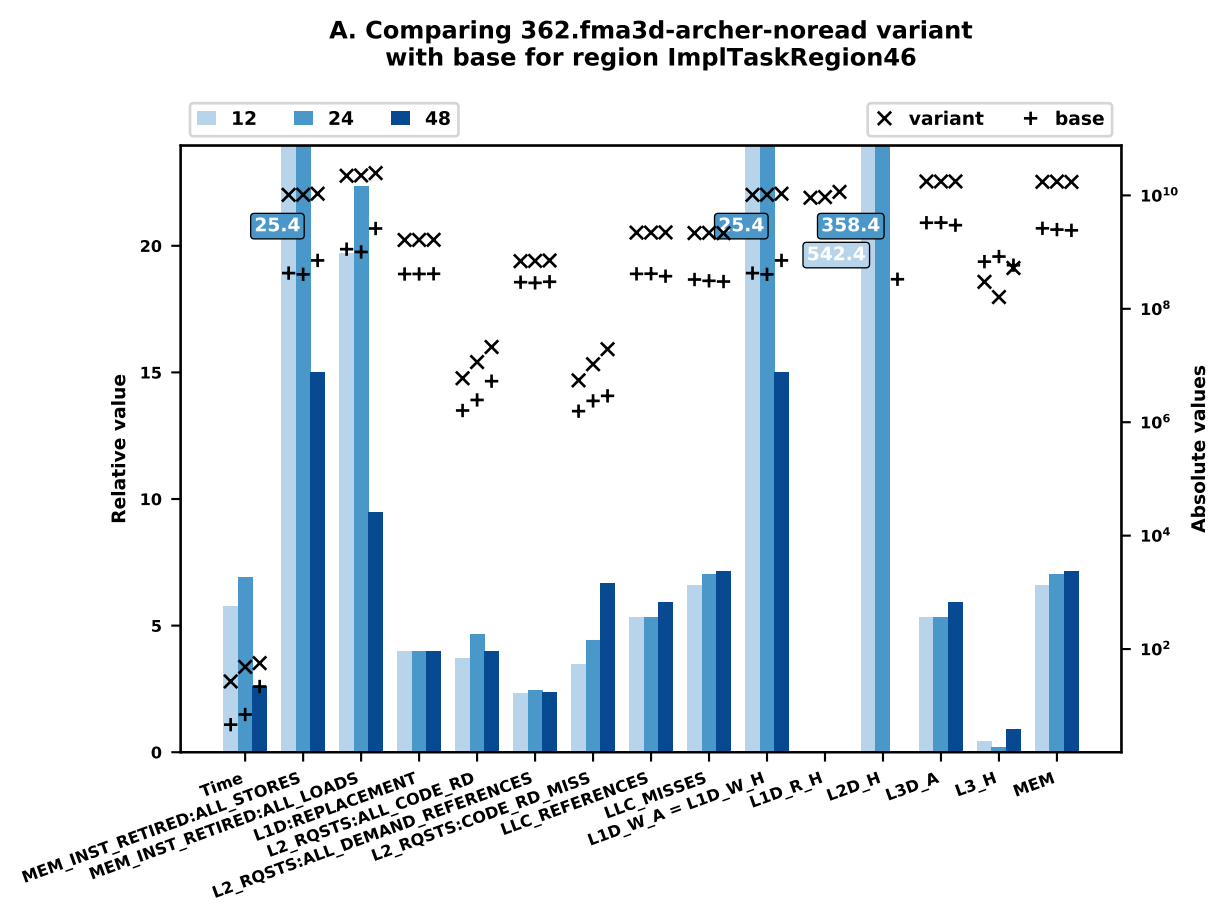

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion45
12
24
48
variant
base
217.9
299.0
217.9
299.0
Relative value
Absolute values
0
10
20
30
40
10^{7}
10^{5}
10^{3}
10^{1}
10^{-1}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

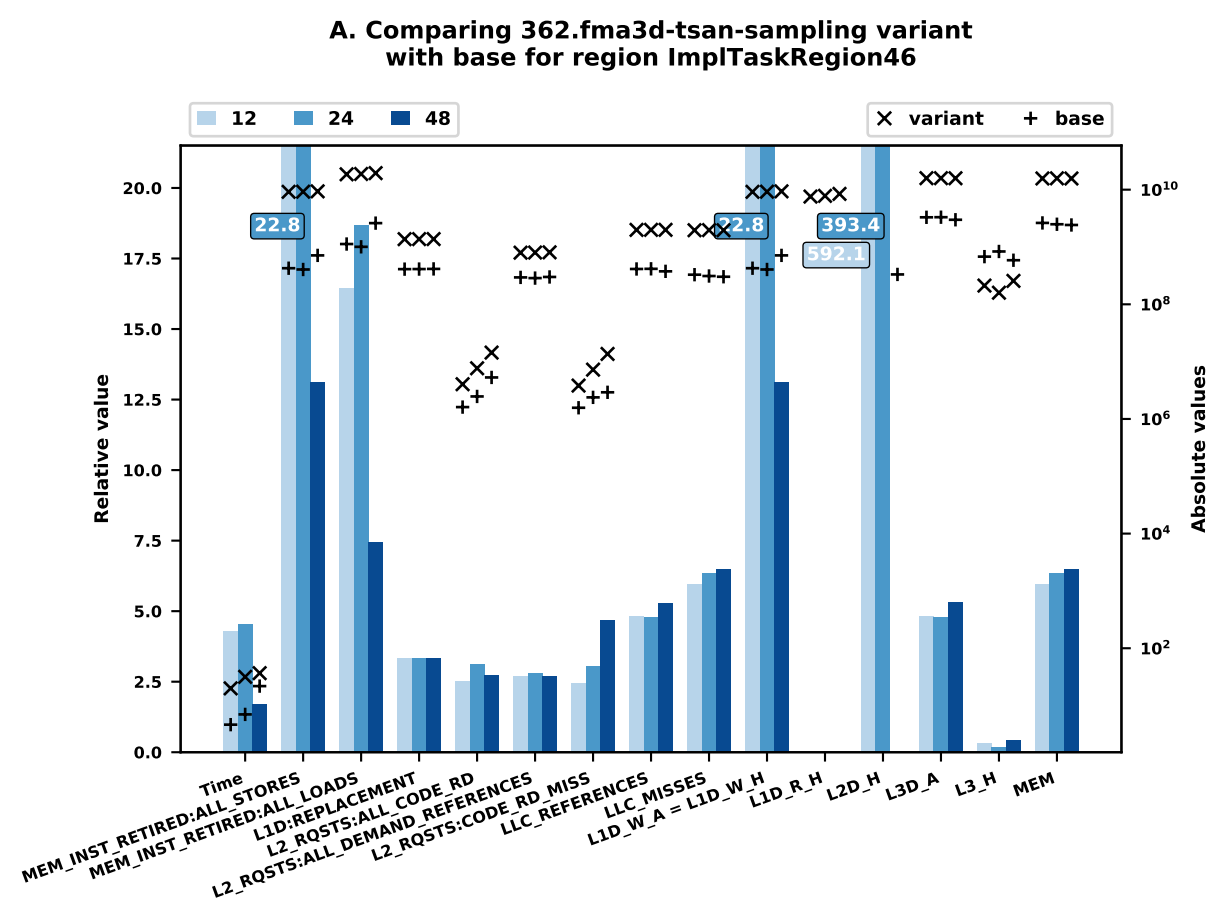

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion45
12
24
48
variant
base
147.3
203.3
147.3
203.3
Relative value
Absolute values
0
10
20
30
40
50
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

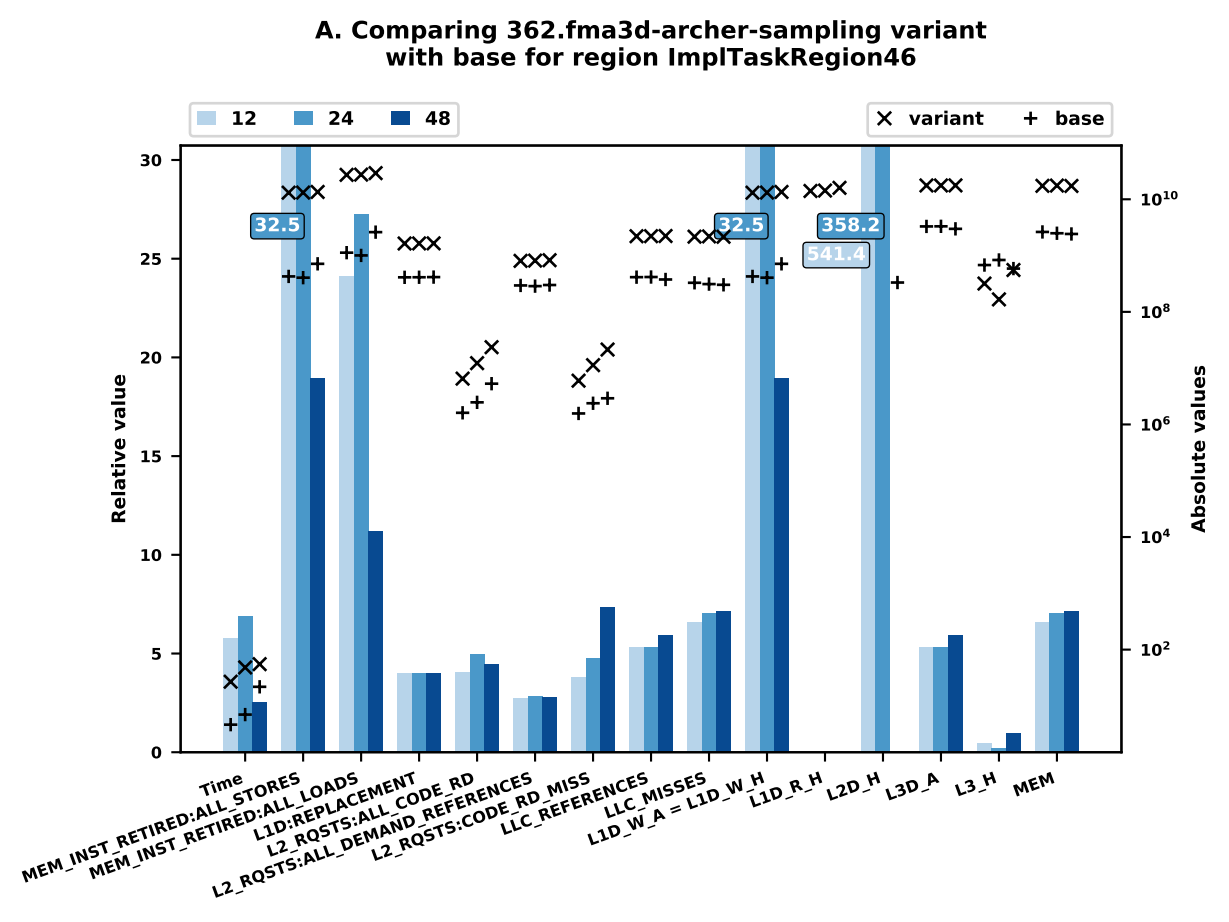

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion45
12
24
48
variant
base
Relative value
Absolute values
190.6
260.1
190.6
260.1
0
10
20
30
40
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

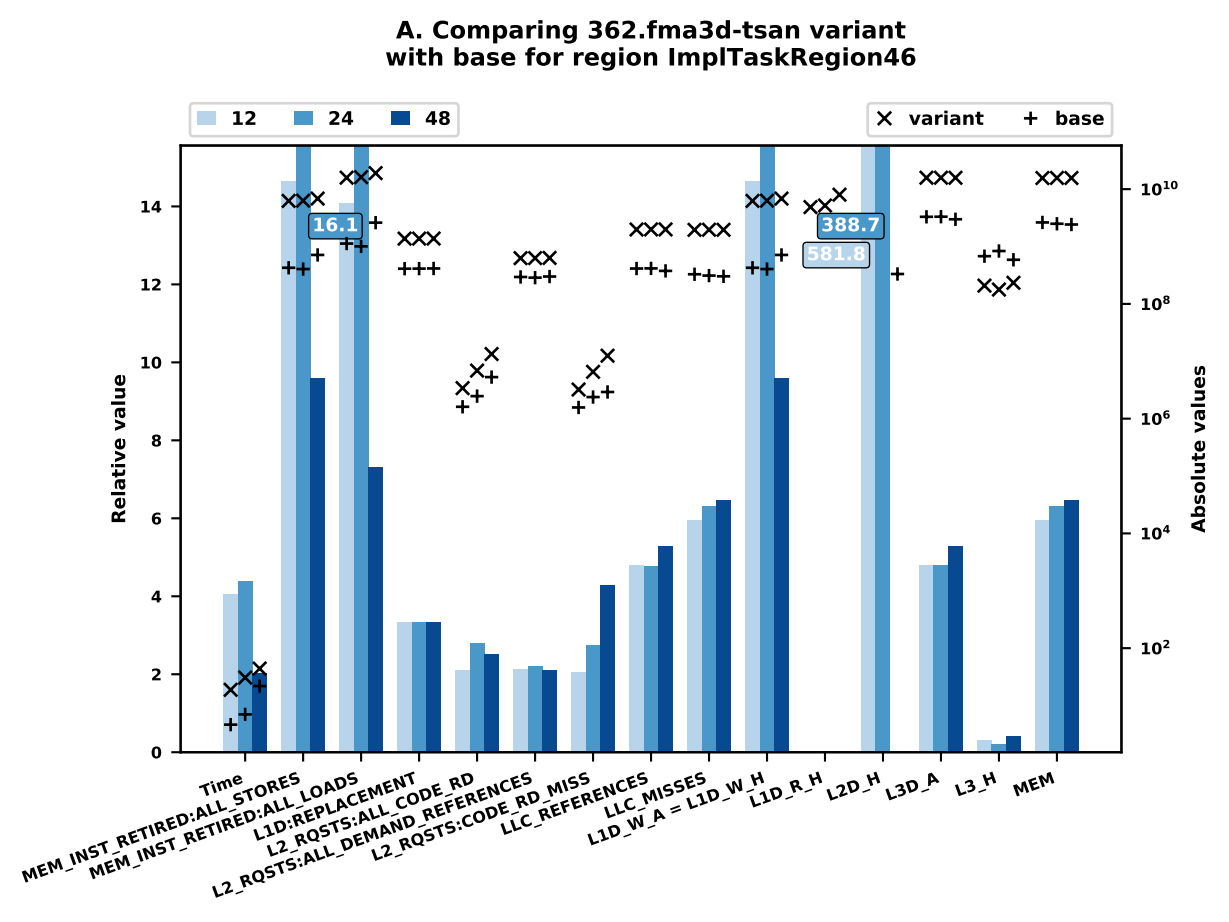

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion45
12
24
48
variant
base
120.7
164.5
120.7
164.5
Relative value
Absolute values
0
10
20
30
40
10^{-1}
10^{1}
10^{3}
10^{5}
10^{7}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

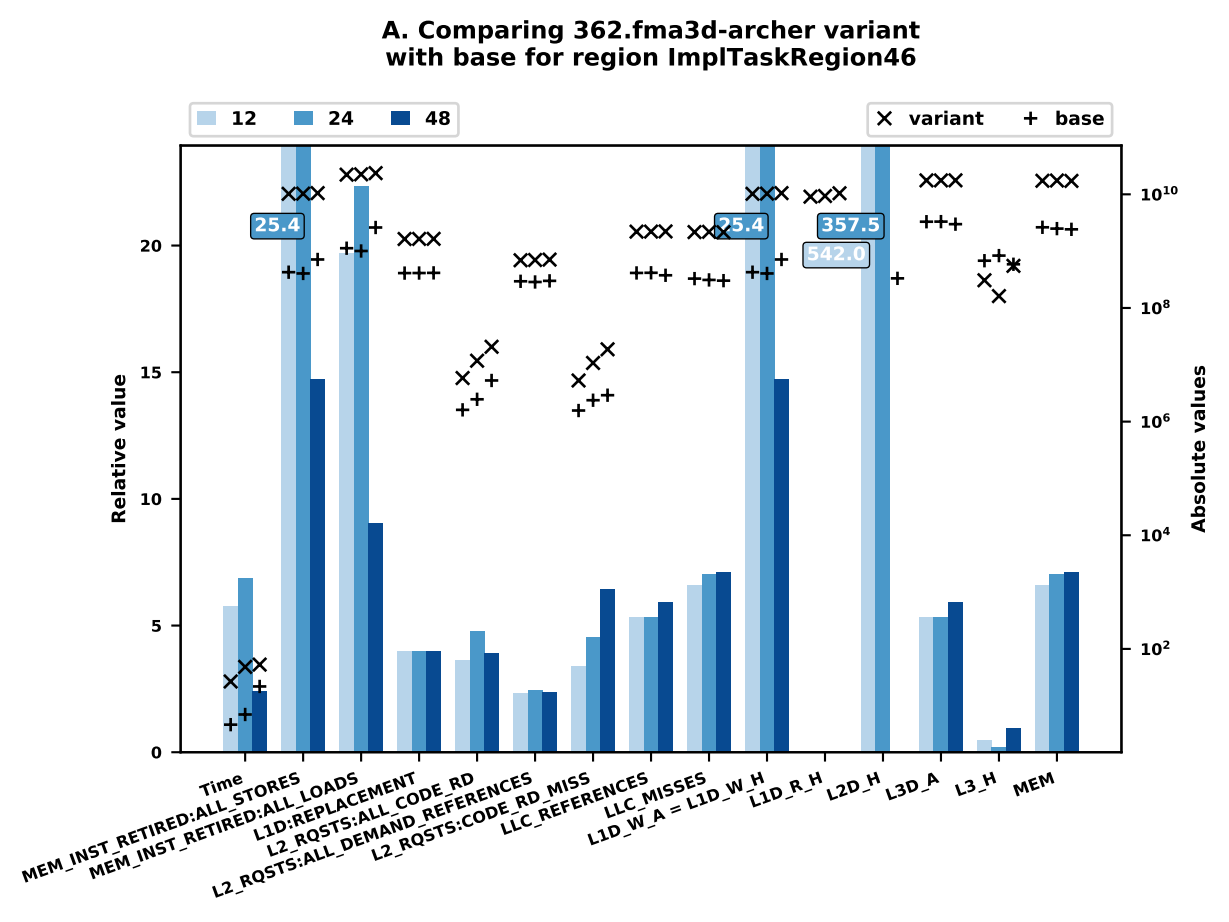

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion46
12
24
48
variant
base
Relative value
Absolute values
16.1
394.2
588.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

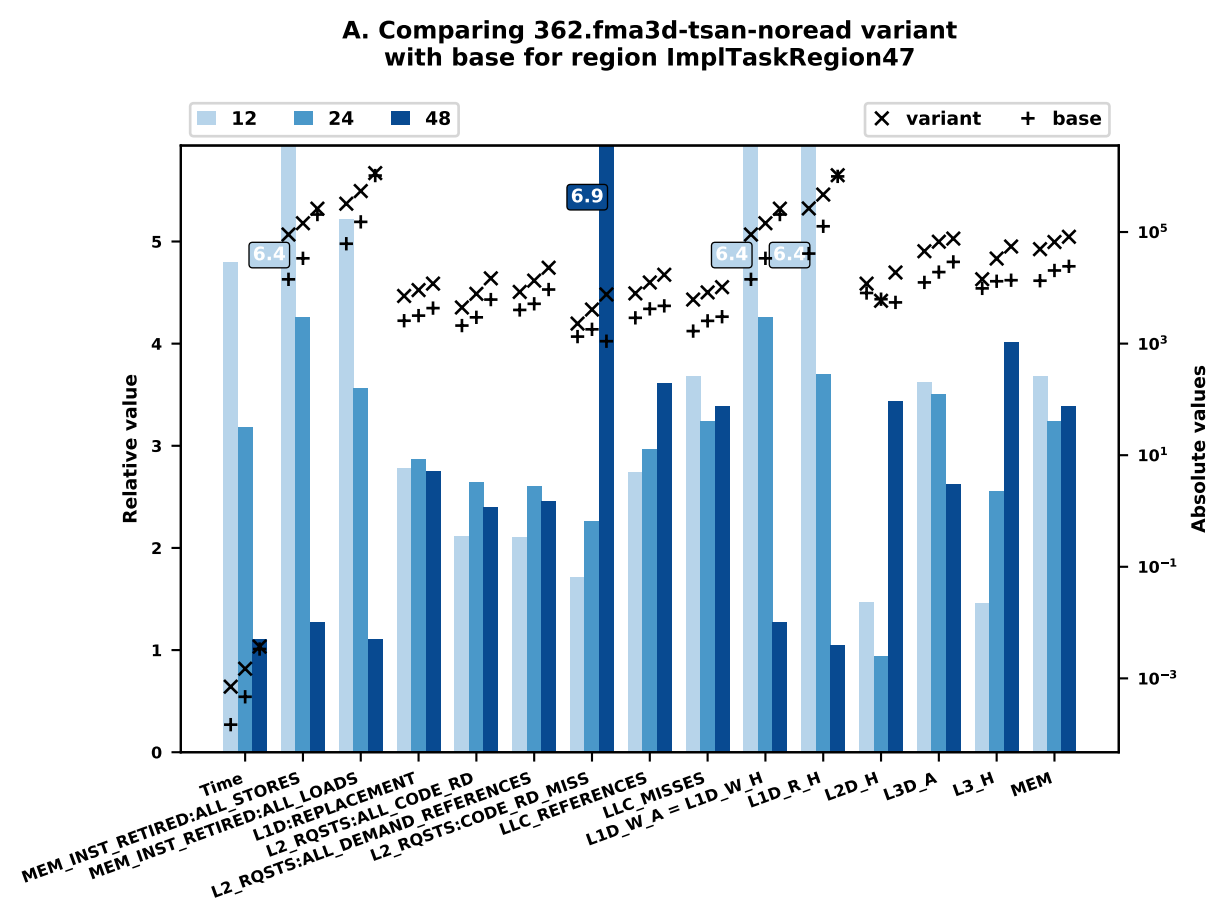

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion46
12
24
48
variant
base
Relative value
Absolute values
25.4
25.4
358.4
542.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

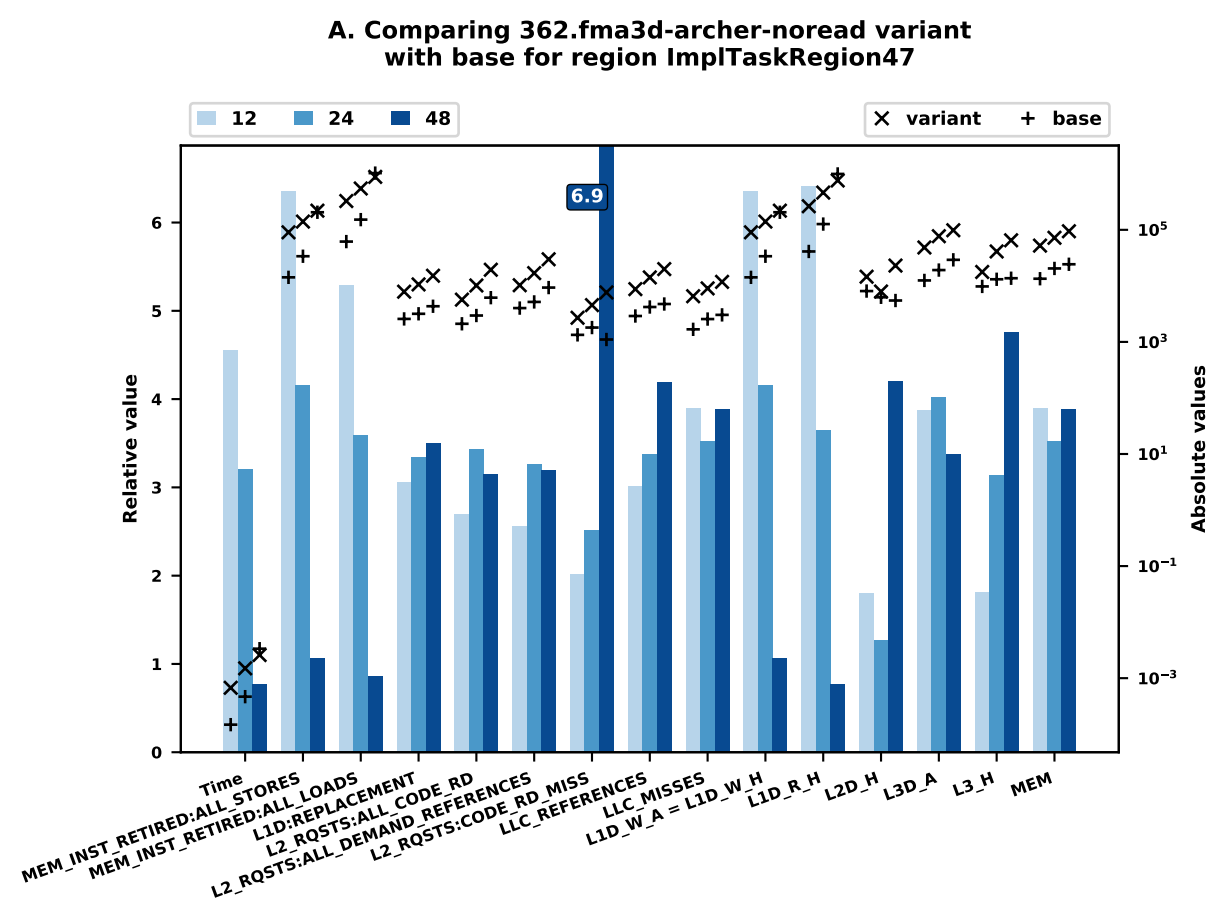

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion46
12
24
48
variant
base
Relative value
Absolute values
22.8
22.8
393.4
592.1
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

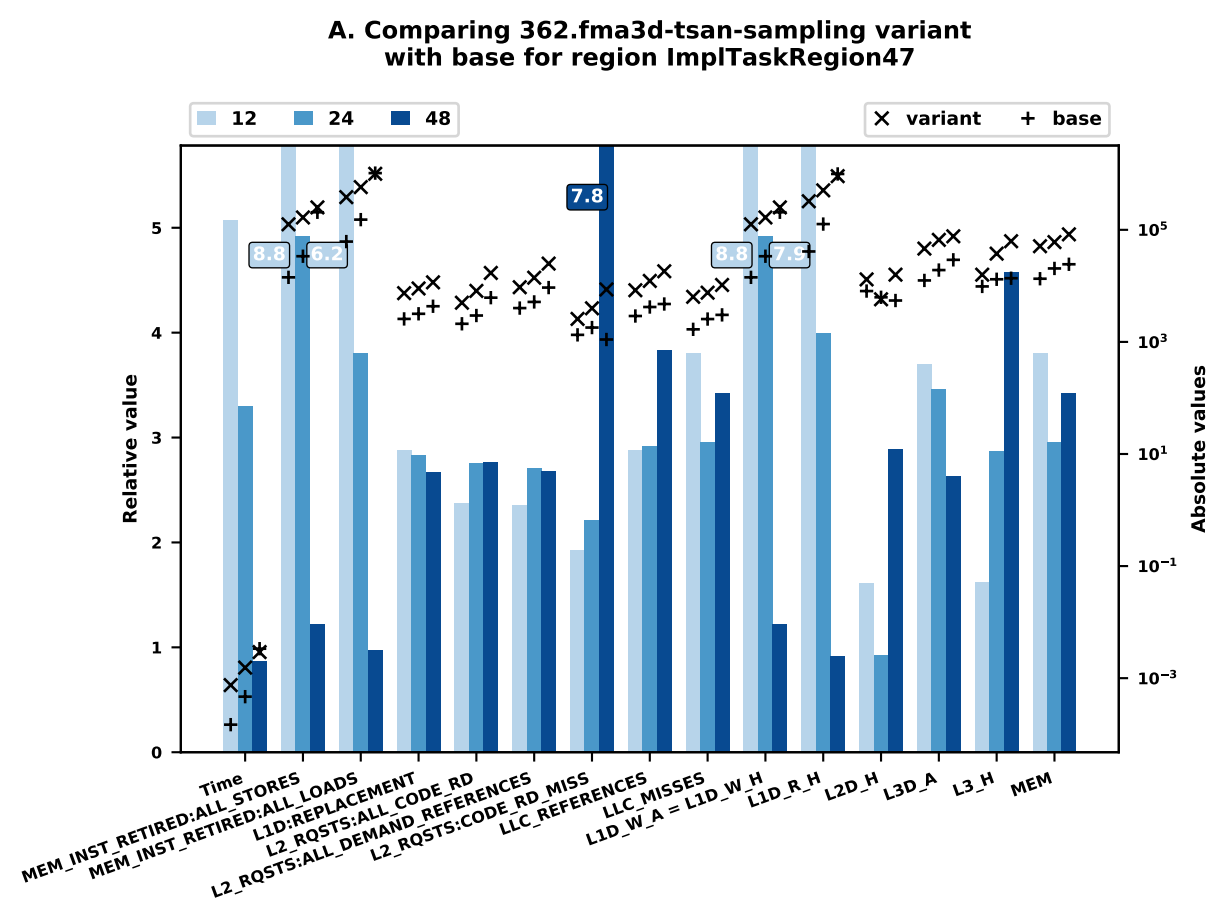

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion46
12
24
48
variant
base
Relative value
Absolute values
32.5
32.5
358.2
541.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

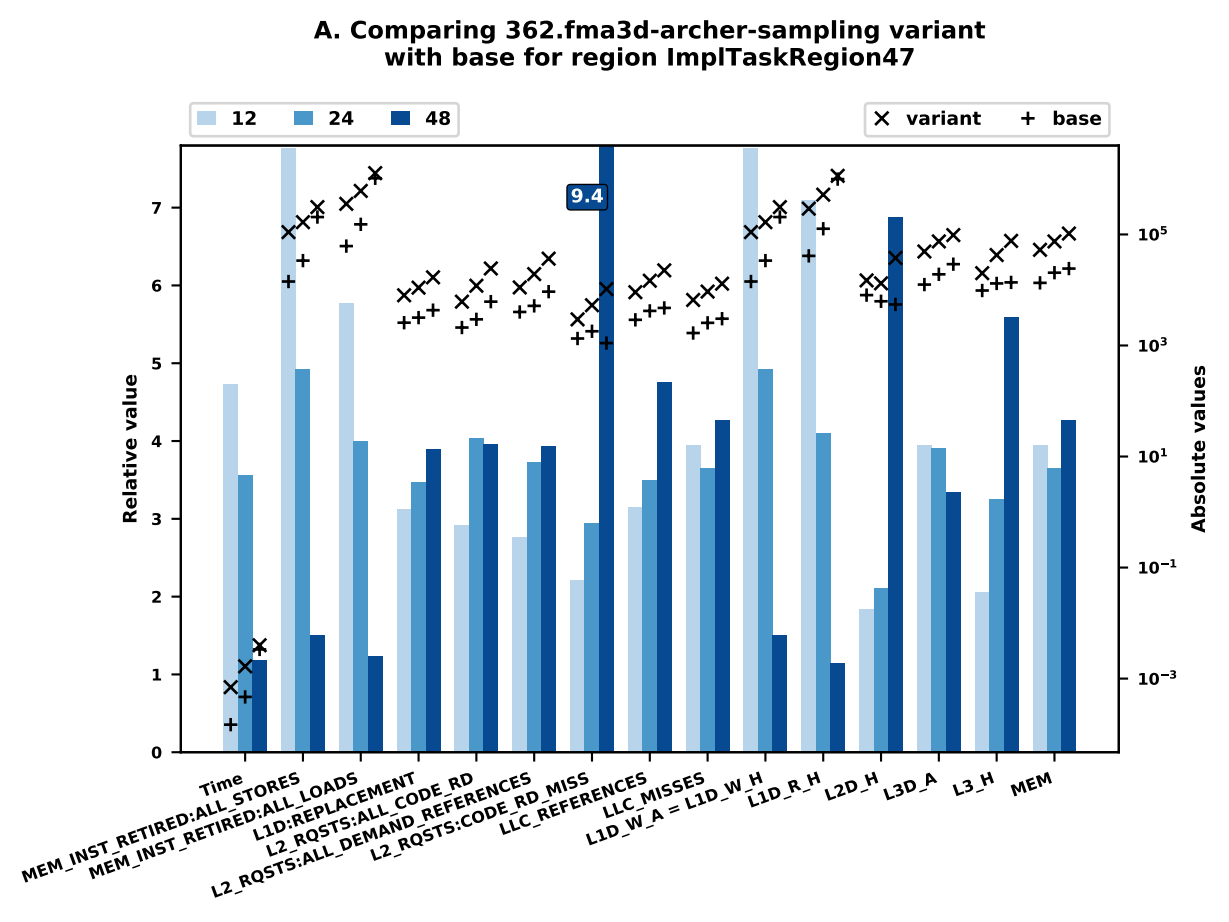

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion46
12
24
48
variant
base
Relative value
Absolute values
16.1
388.7
581.8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

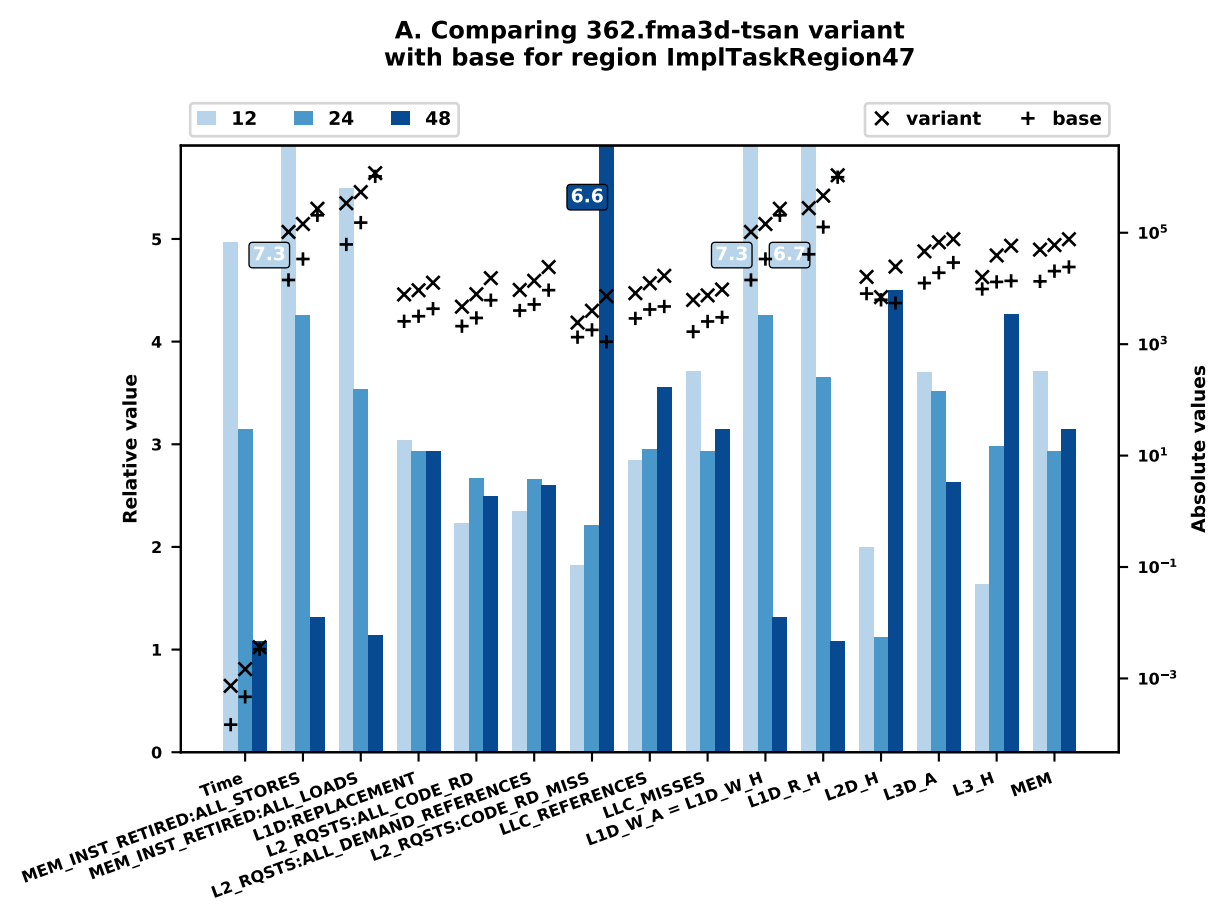

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion46
12
24
48
variant
base
Relative value
Absolute values
25.4
25.4
357.5
542.0
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

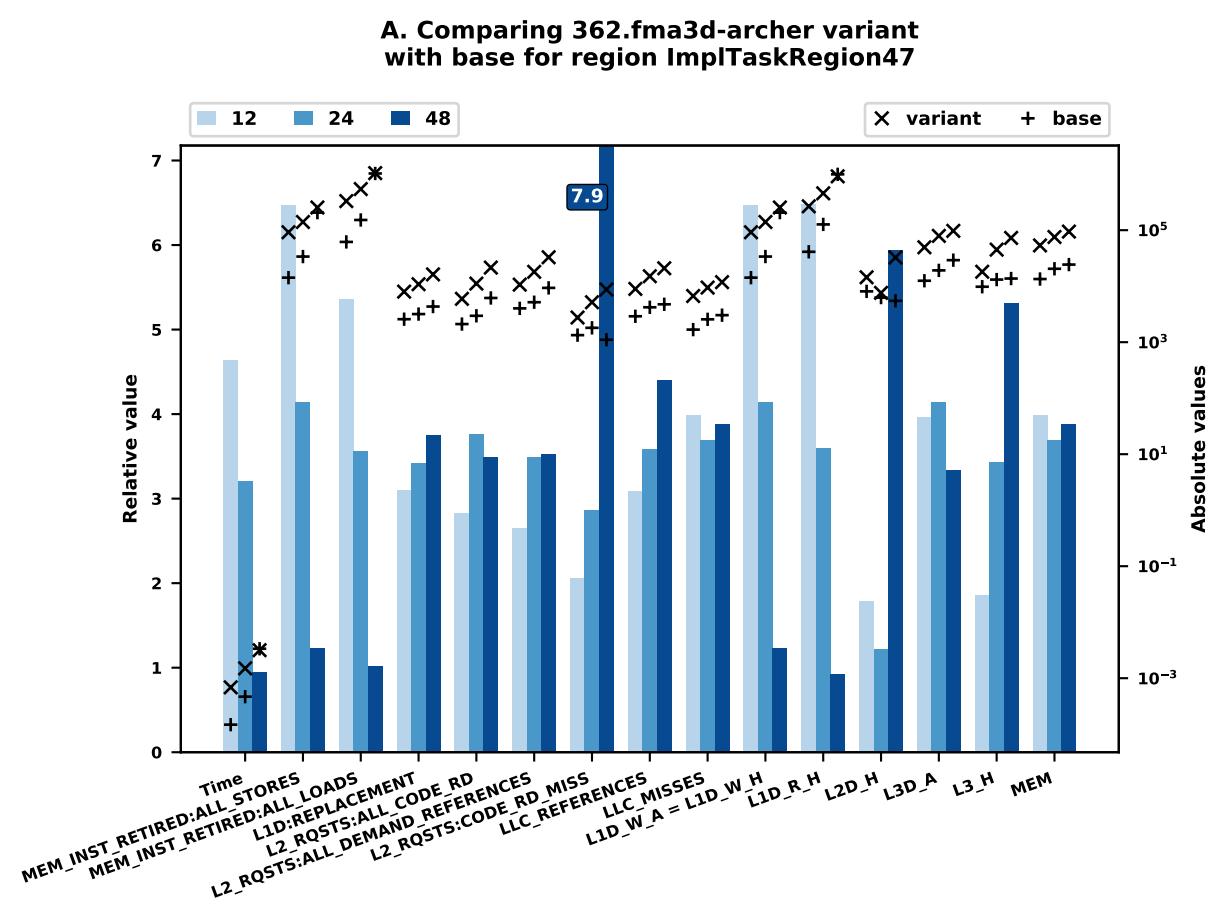

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion47
12
24
48
variant
base
Relative value
Absolute values
6.4
6.9
6.4
6.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

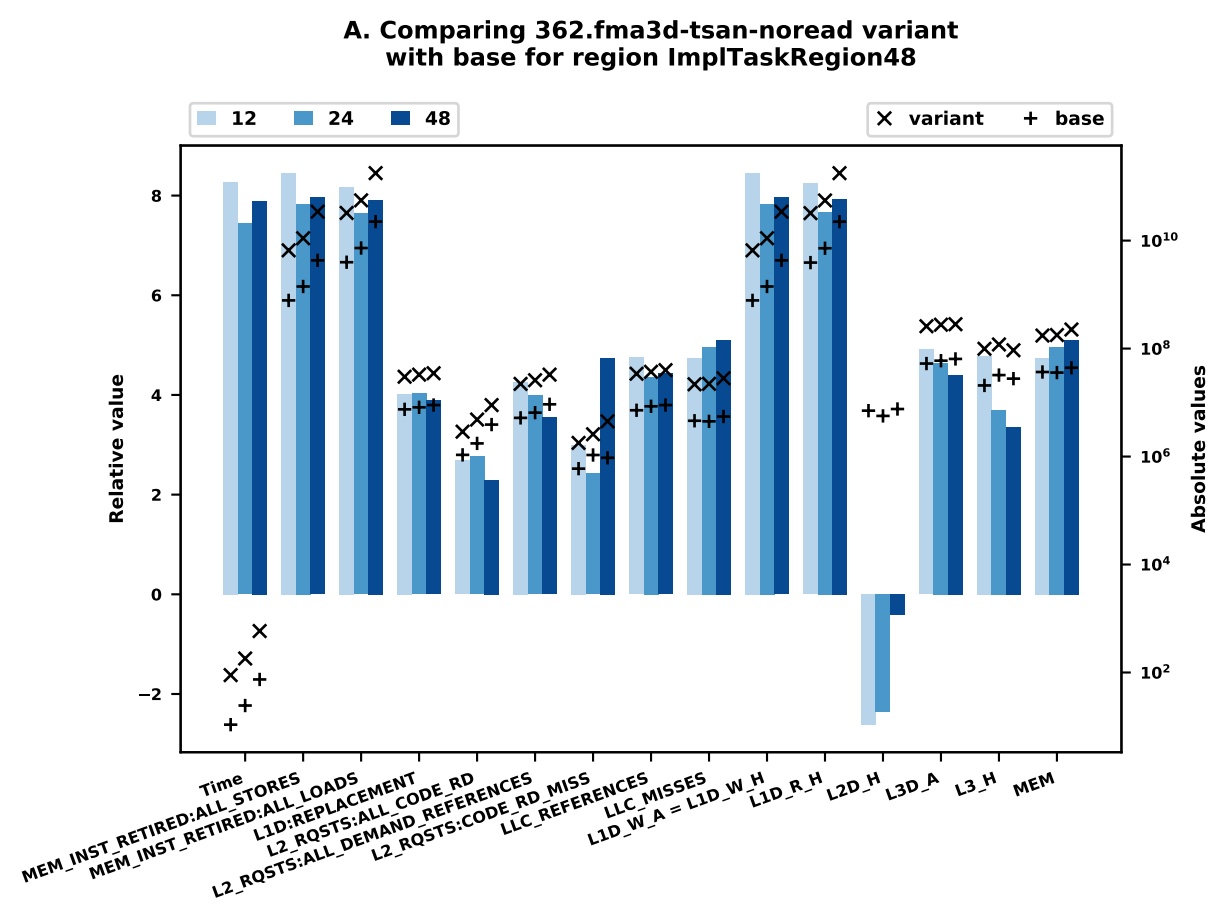

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion47
12
24
48
variant
base
6.9
Relative value
Absolute values
0
1
2
3
4
5
6
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

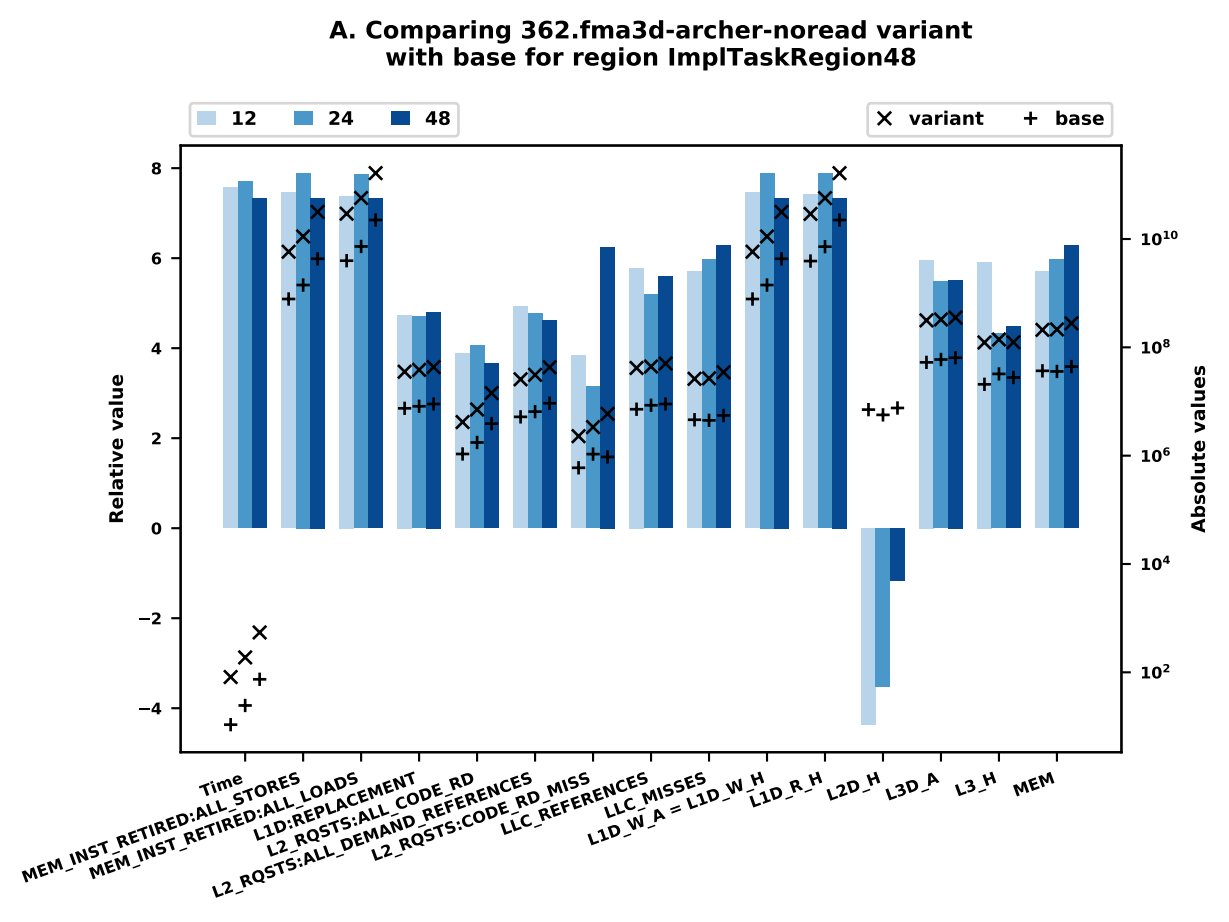

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion47
12
24
48
variant
base
Relative value
Absolute values
0
1
2
3
4
5
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
8.8
6.2
7.8
8.8
7.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

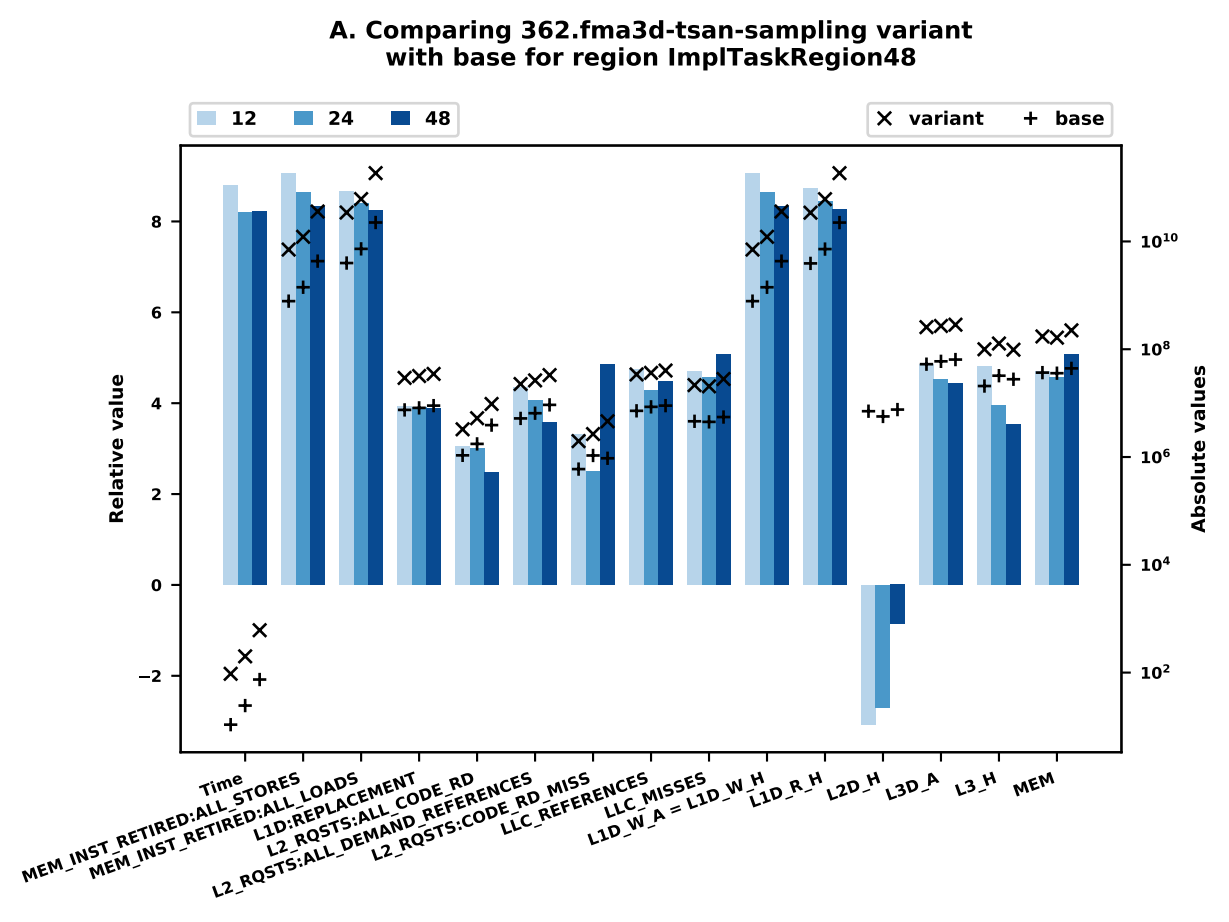

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion47
12
24
48
variant
base
9.4
Relative value
Absolute values
0
1
2
3
4
5
6
7
10^{5}
10^{3}
10^{1}
10^{-1}
10^{-3}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

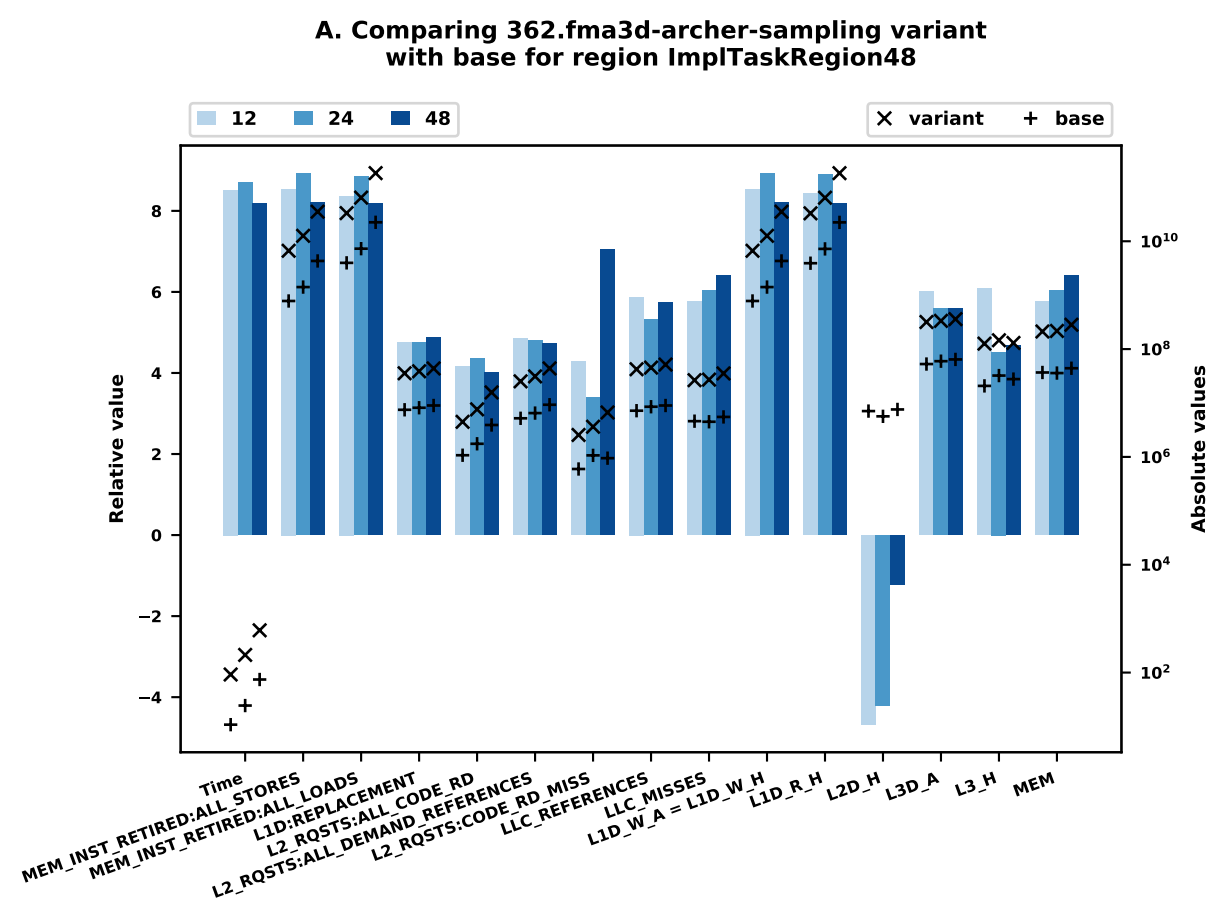

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion47
12
24
48
variant
base
Relative value
Absolute values
7.3
6.6
7.3
6.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

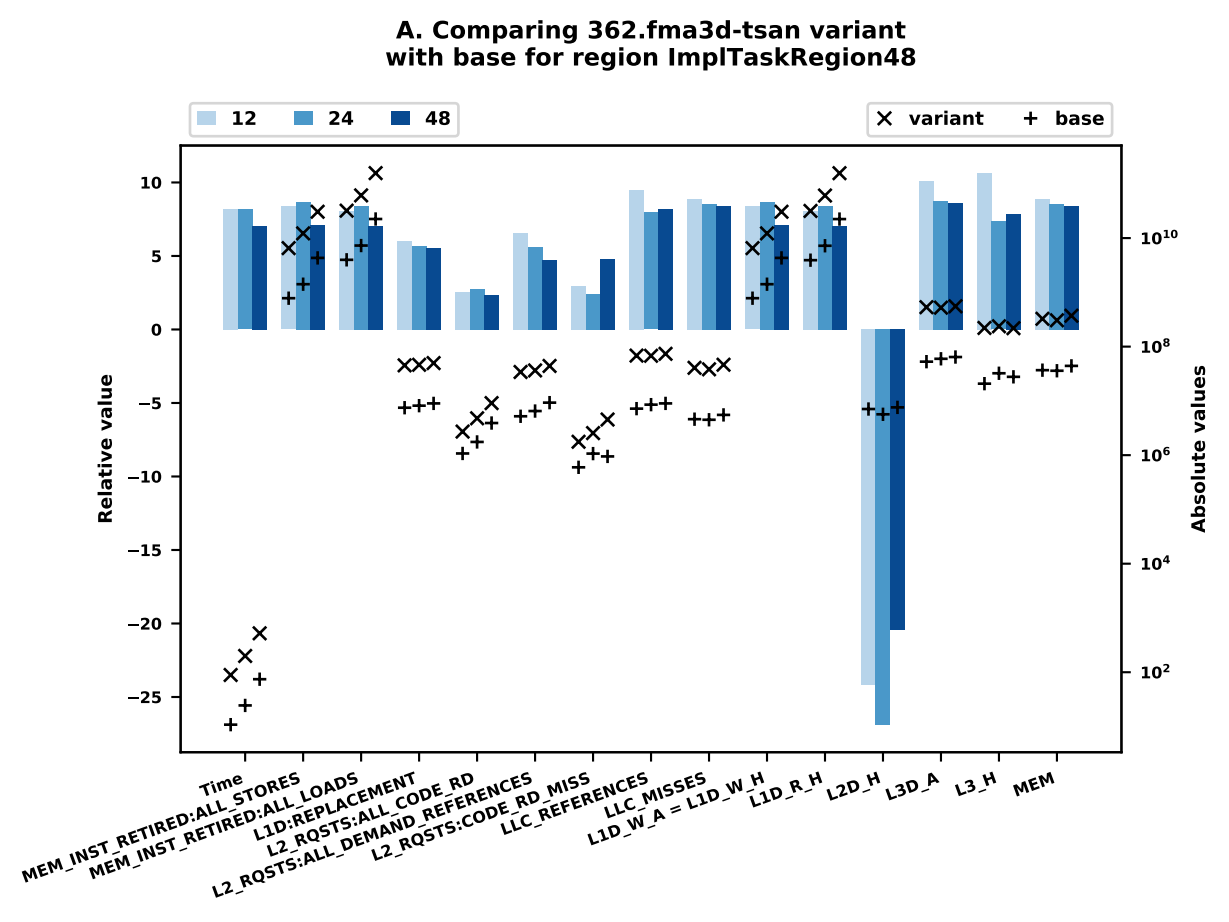

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion47
12
24
48
variant
base
Relative value
Absolute values
7.9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

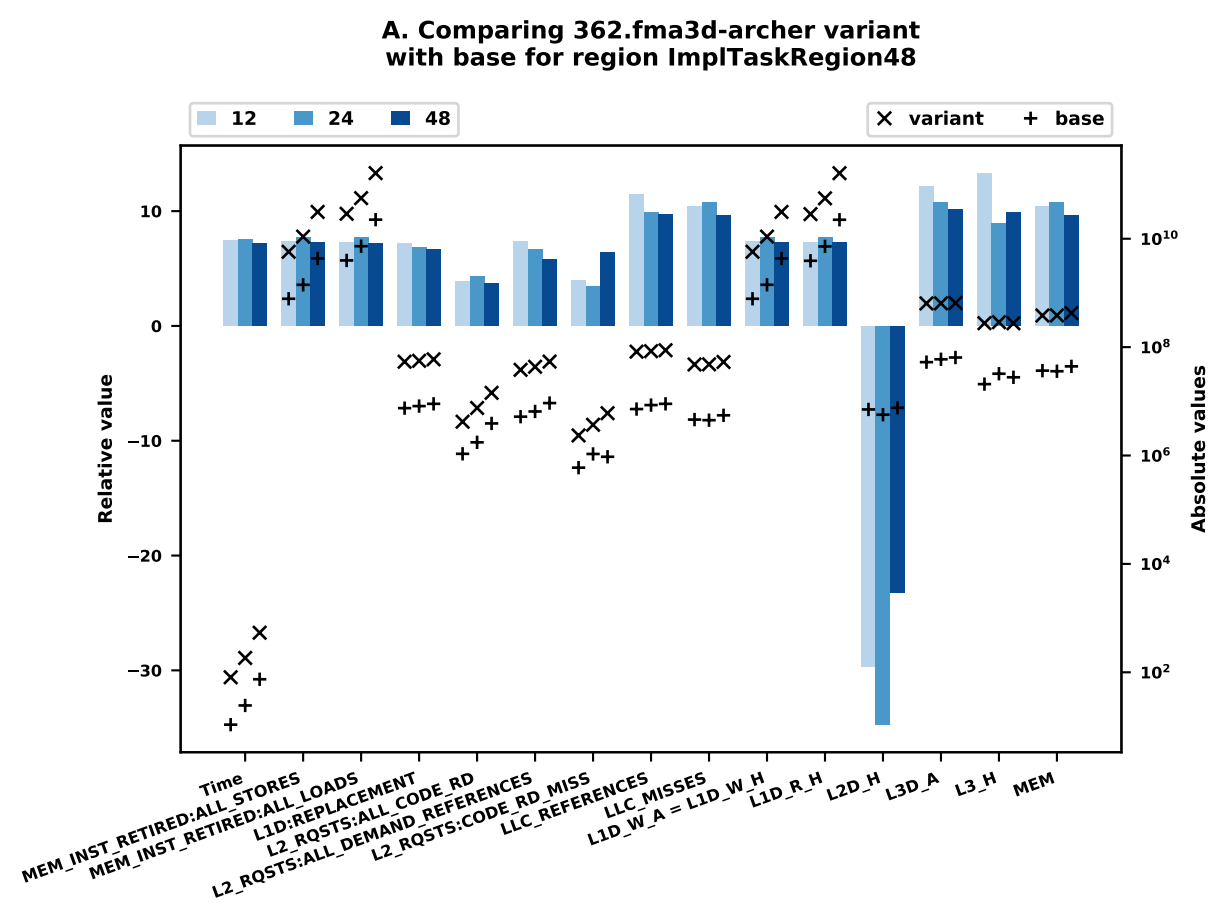

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion48
12
24
48
variant
base
Relative value
Absolute values
8
6
4
2
0
−2
10^{10}
10^{8}
10^{6}
10^{4}
10^{2}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

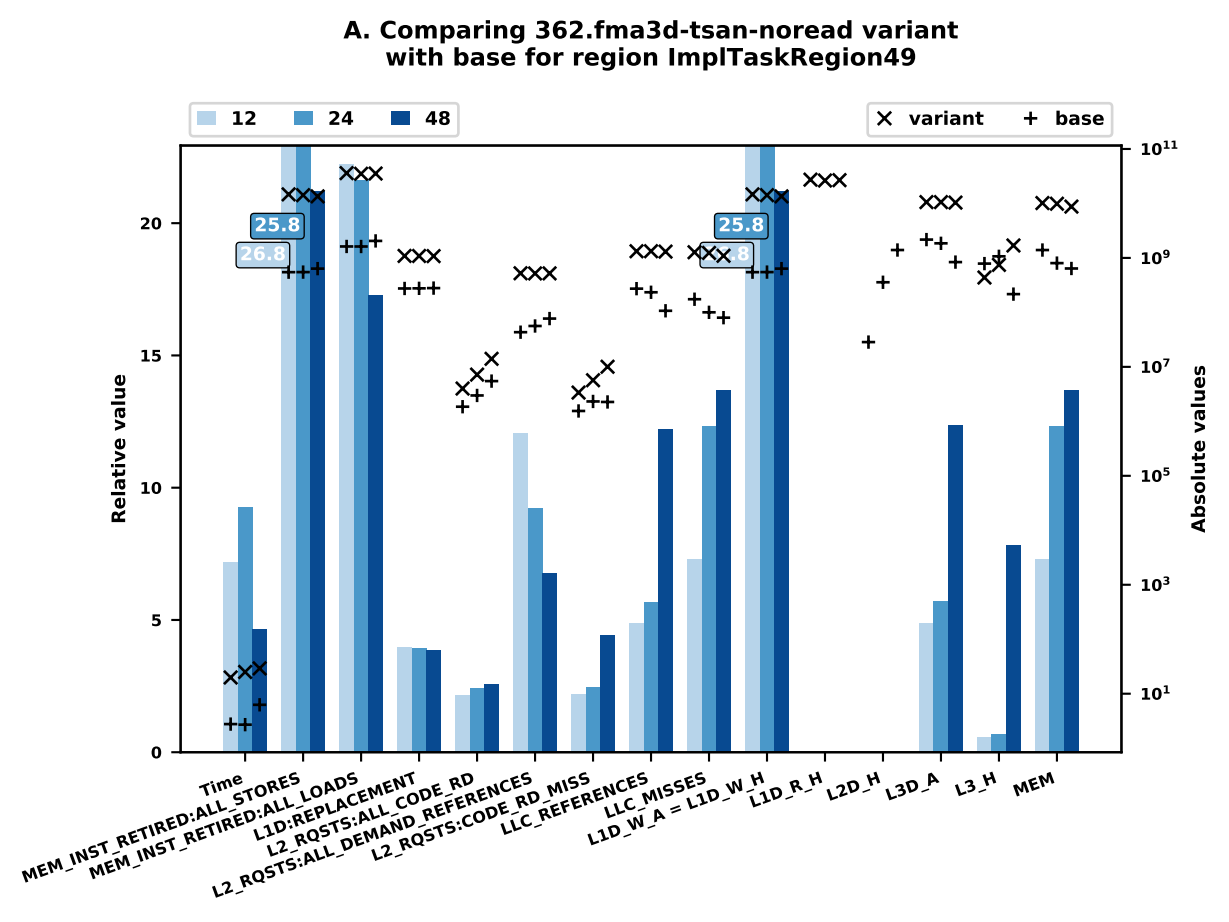

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion48
12
24
48
variant
base
Relative value
Absolute values
8
6
4
2
0
−2
−4
10^{10}
10^{8}
10^{6}
10^{4}
10^{2}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

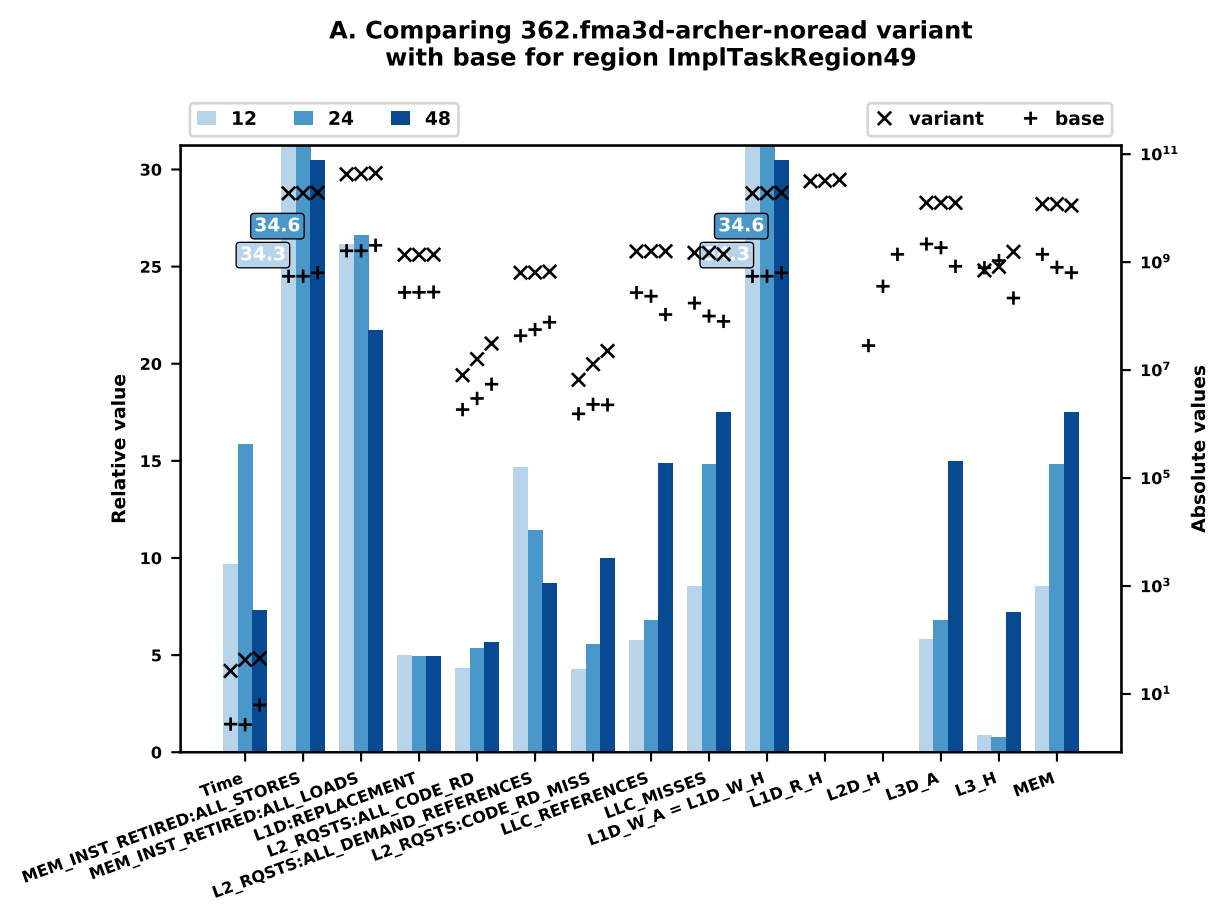

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion48
12
24
48
variant
base
Relative value
Absolute values
8
6
4
2
0
−2
10^{10}
10^{8}
10^{6}
10^{4}
10^{2}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

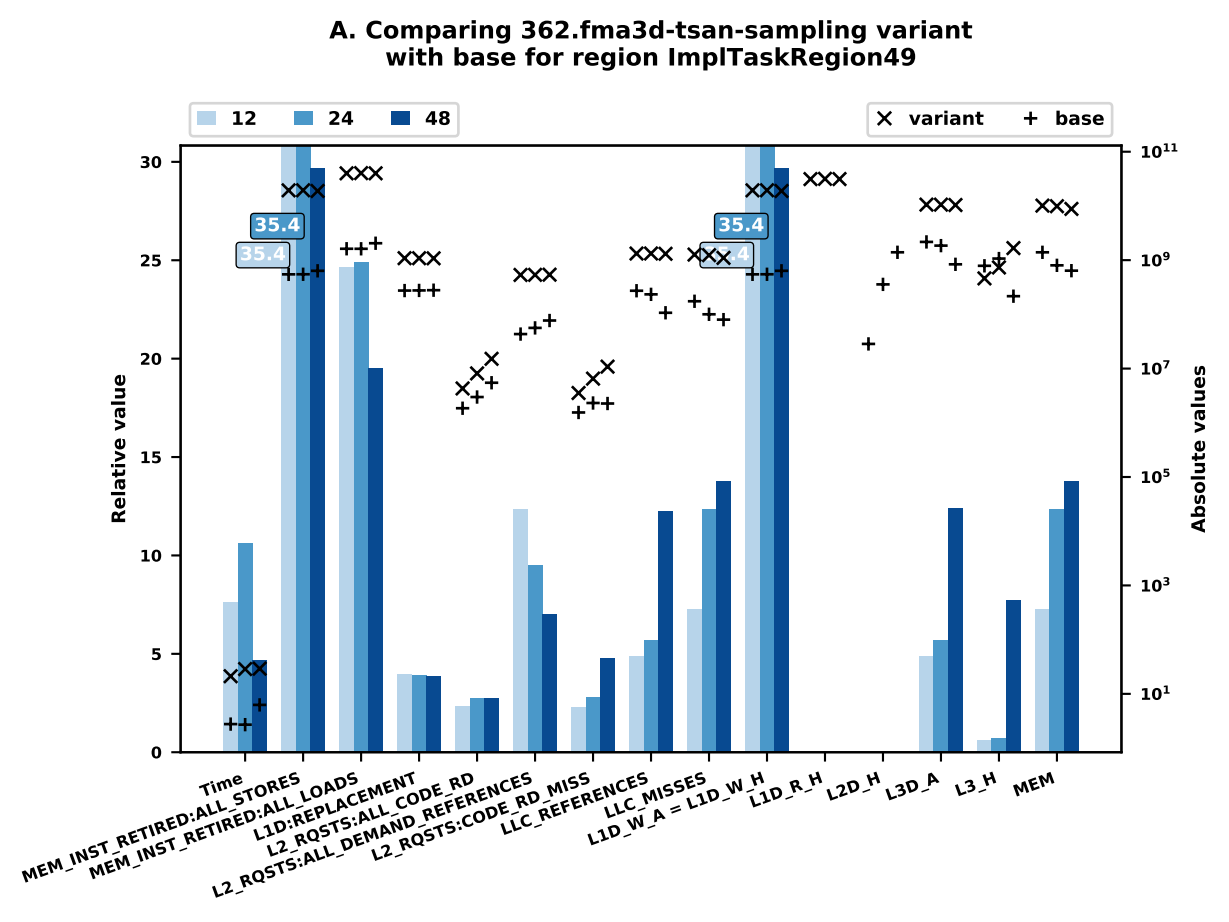

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion48
12
24
48
variant
base
Relative value
Absolute values
8
6
4
2
0
−2
−4
10^{10}
10^{8}
10^{6}
10^{4}
10^{2}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

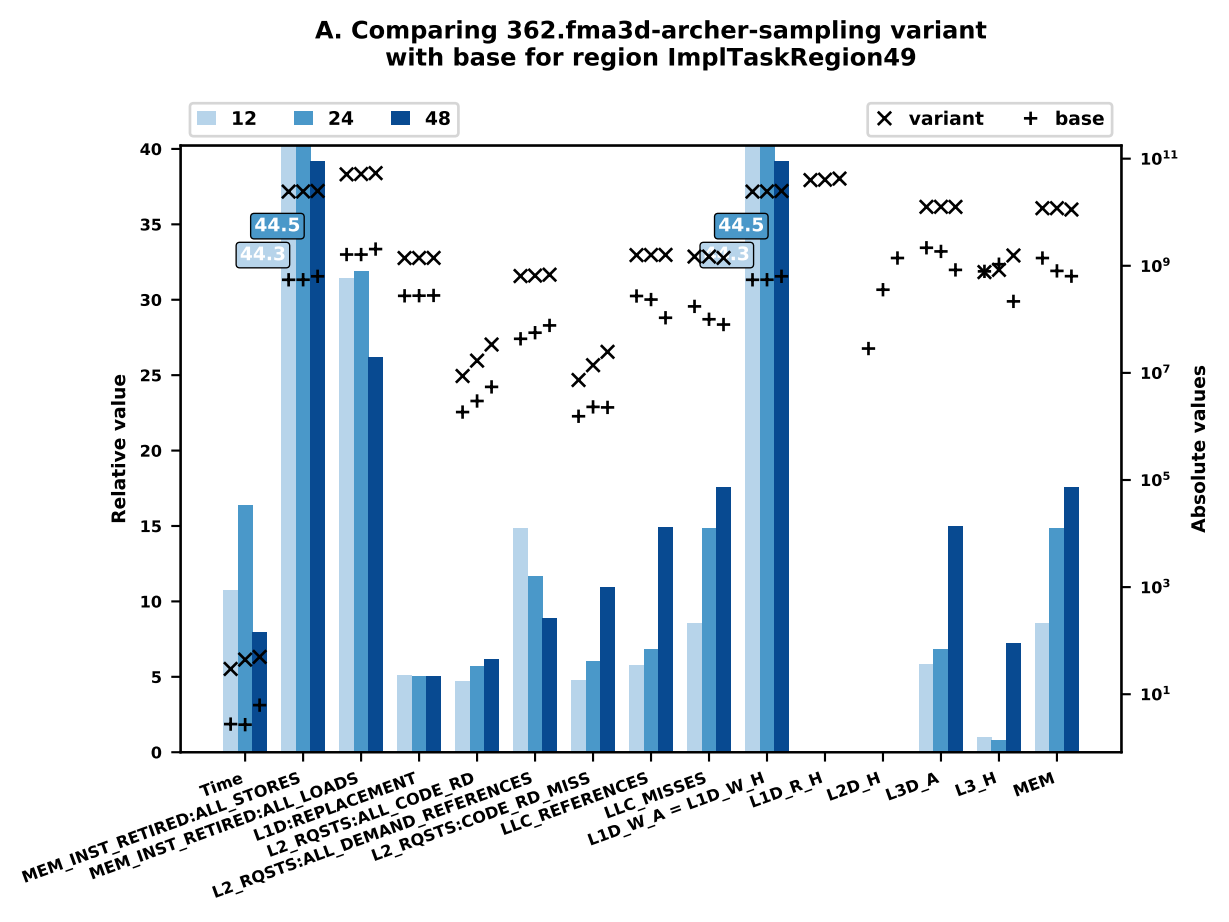

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion48
12
24
48
variant
base
Relative value
Absolute values
10
5
0
−5
−10
−15
−20
−25
10^{10}
10^{8}
10^{6}
10^{4}
10^{2}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

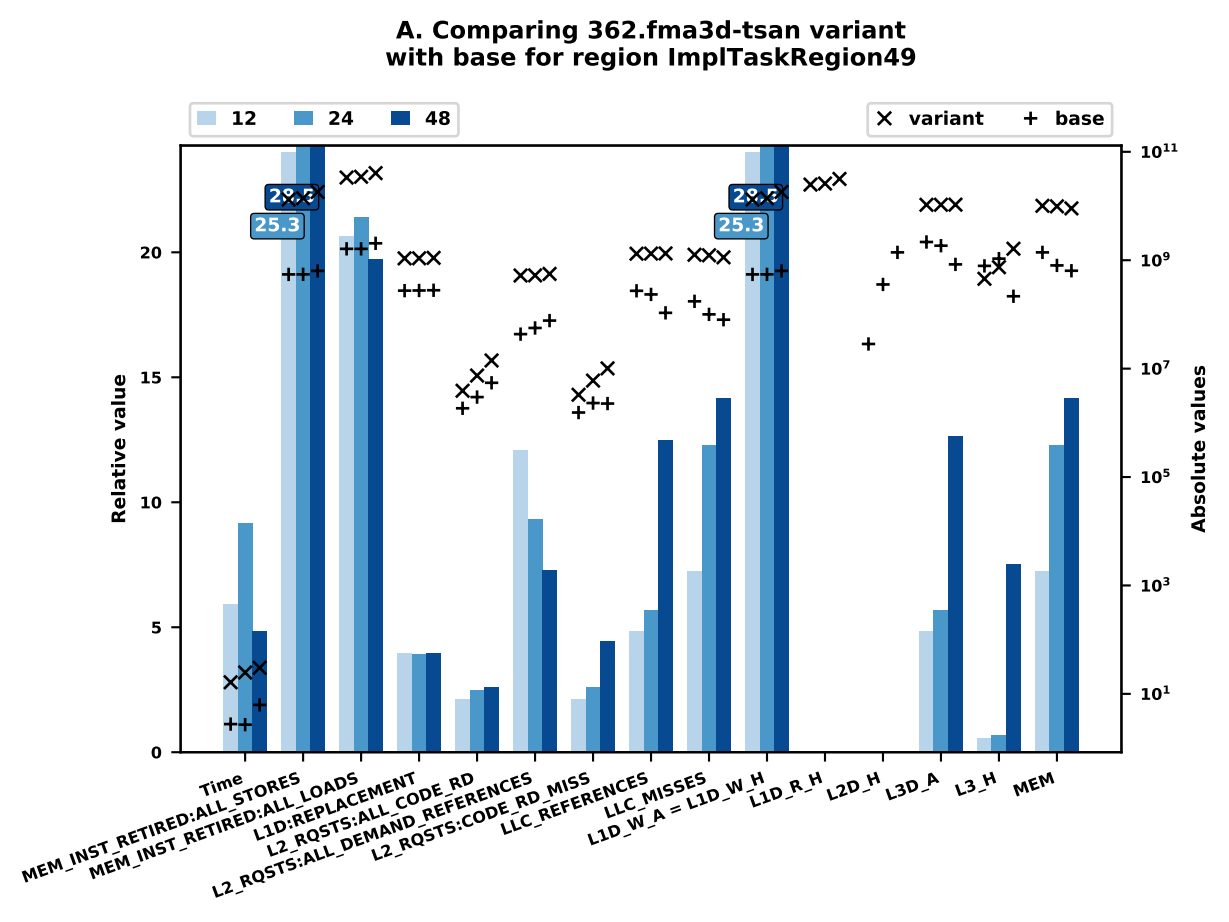

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion48
12
24
48
variant
base
Relative value
Absolute values
10
0
−10
−20
−30
10^{10}
10^{8}
10^{6}
10^{4}
10^{2}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

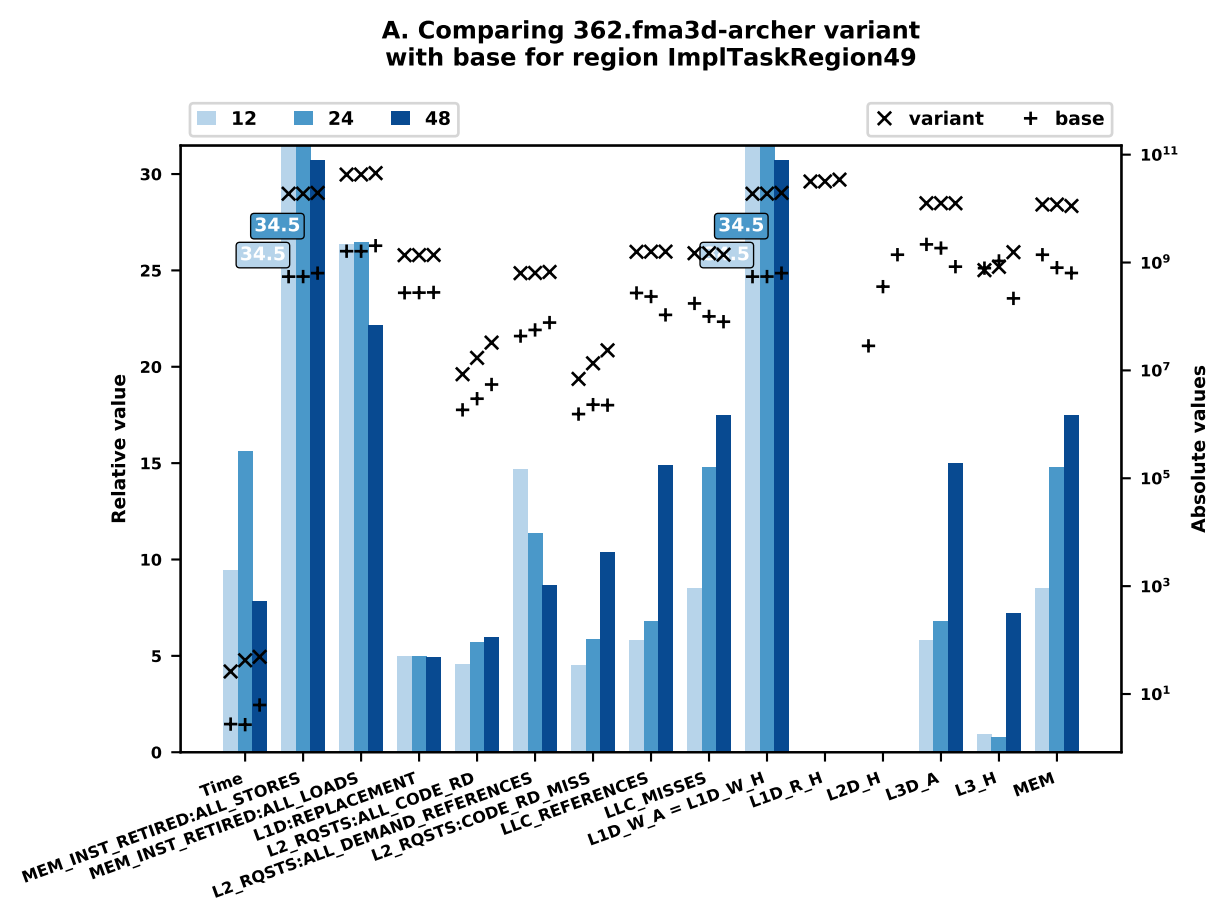

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion49
12
24
48
variant
base
Relative value
Absolute values
25.8
26.8
25.8
26.8
0
5
10
15
20
10^{1}
10^{3}
10^{5}
10^{7}
10^{9}
10^{11}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

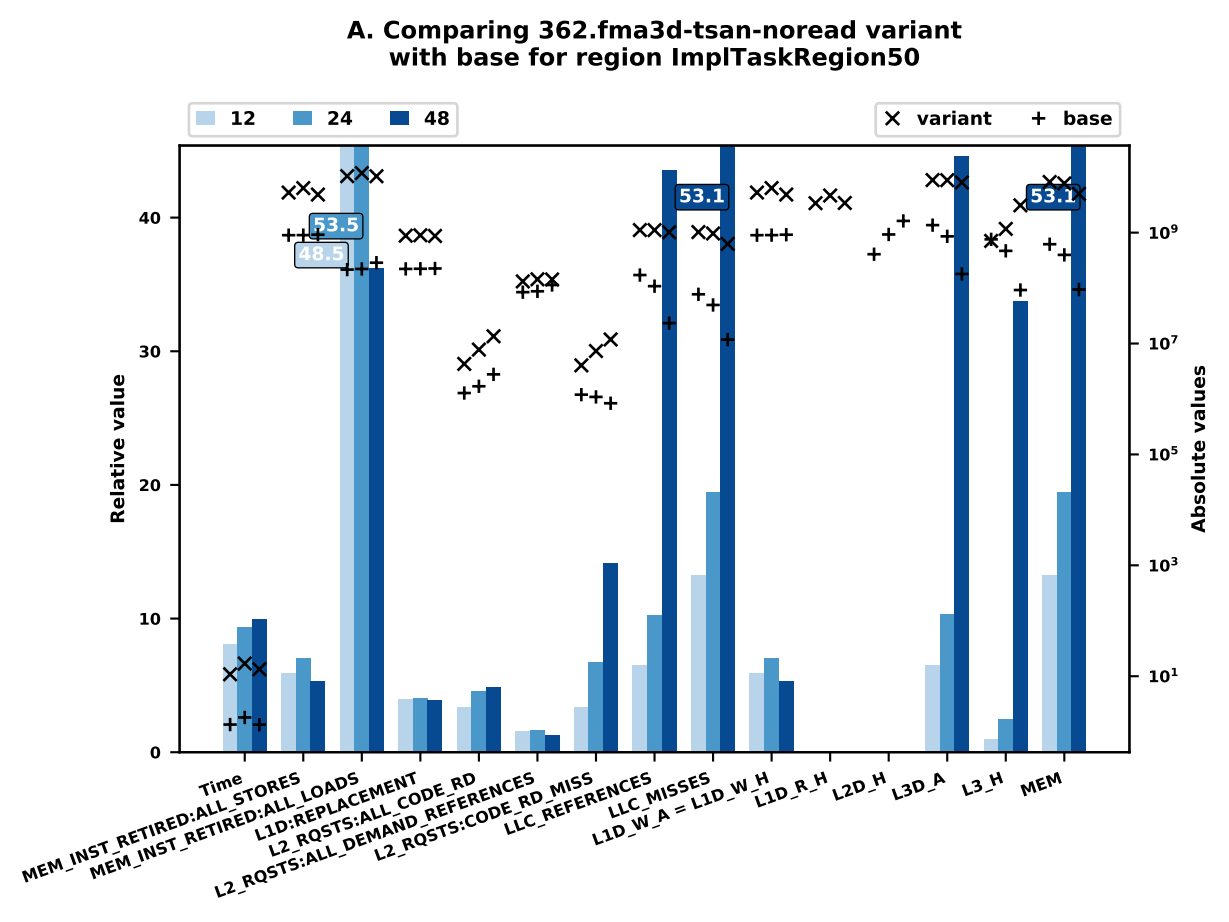

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion49
12
24
48
variant
base
Relative value
Absolute values
34.6
34.3
34.6
34.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

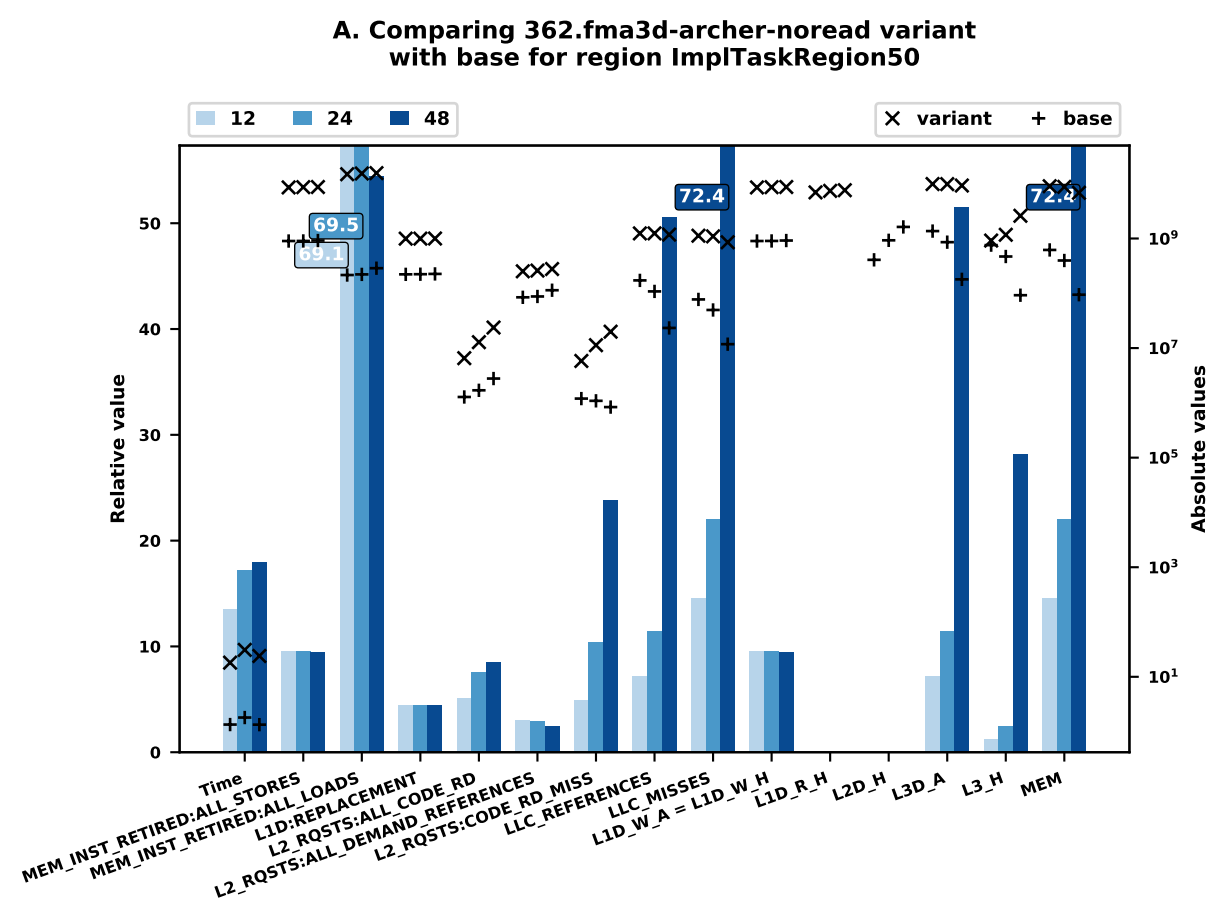

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion49
12
24
48
variant
base
Relative value
Absolute values
35.4
35.4
35.4
35.4
0
5
10
15
20
25
30
10^{1}
10^{3}
10^{5}
10^{7}
10^{9}
10^{11}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

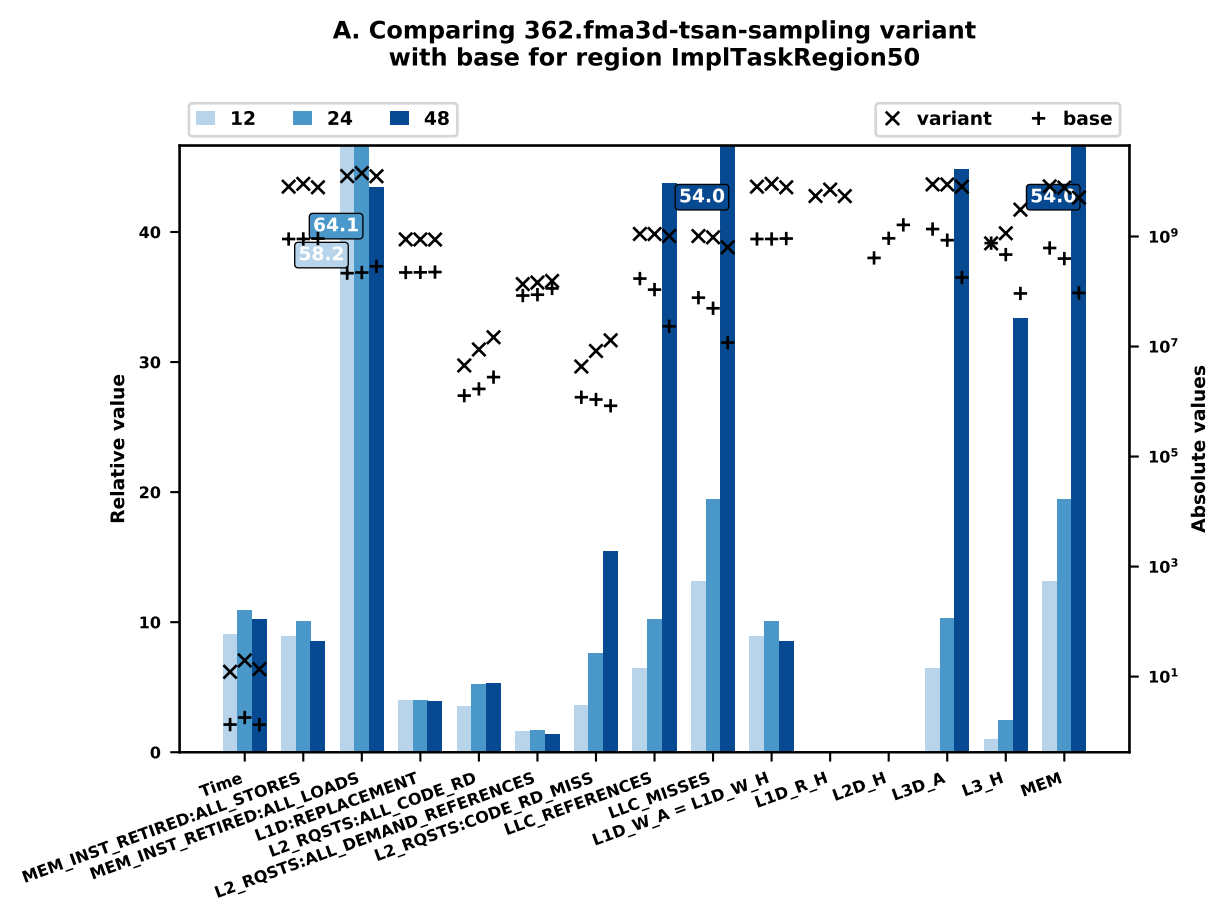

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion49
12
24
48
variant
base
Relative value
Absolute values
44.5
44.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

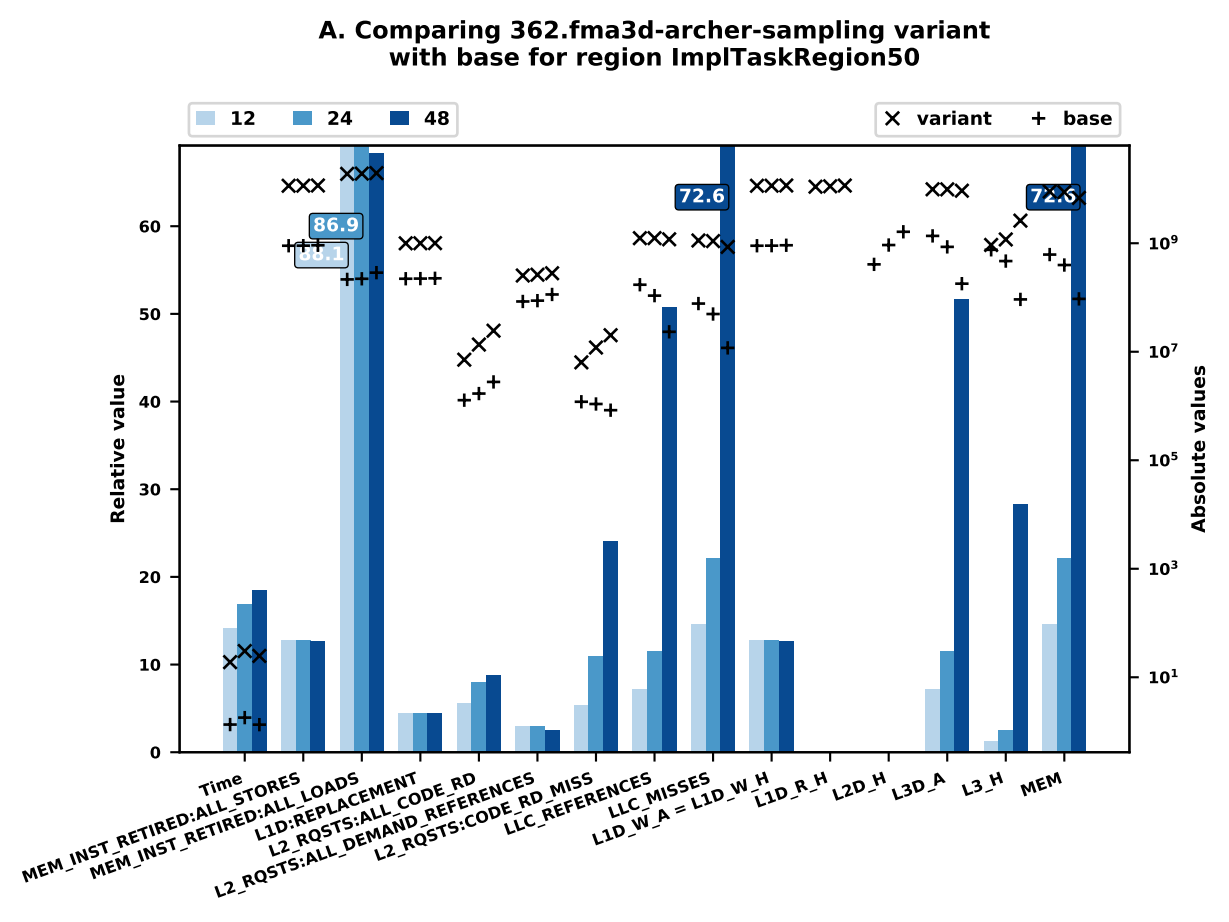

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion49
12
24
48
variant
base
Relative value
Absolute values
25.3
25.3
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

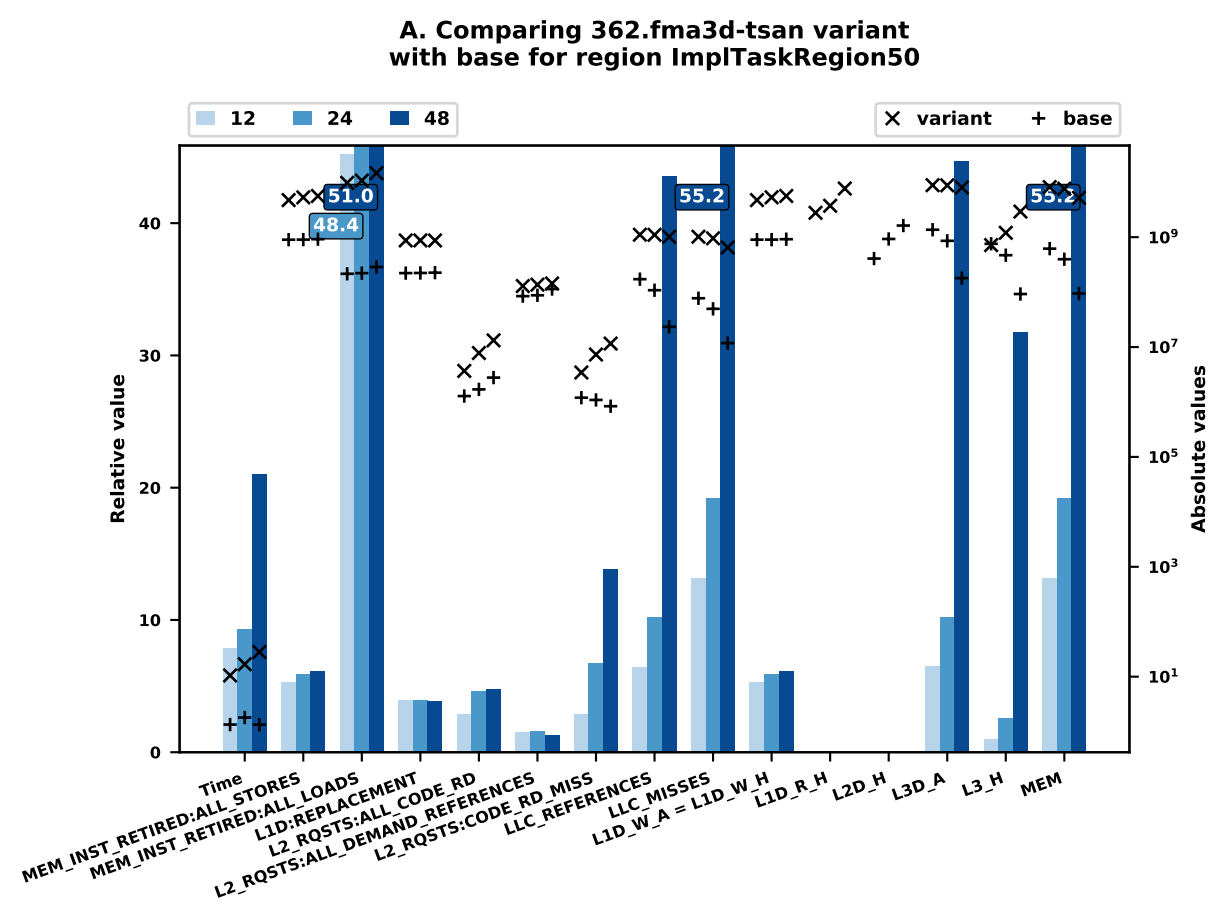

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion49
12
24
48
variant
base
Relative value
Absolute values
34.5
34.5
34.5
34.5
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

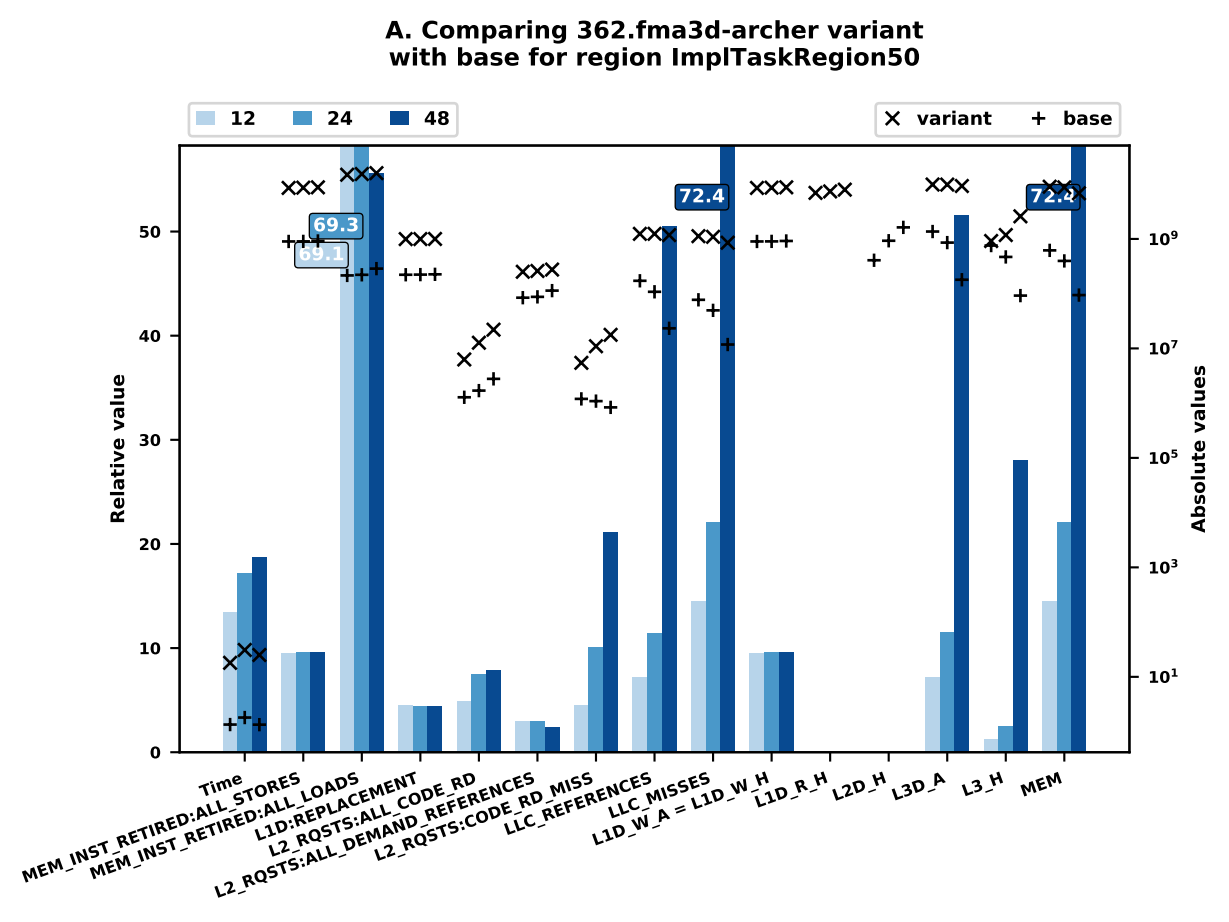

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion50
12
24
48
variant
base
Relative value
Absolute values
0
10
20
30
40
10^1
10^3
10^5
10^7
10^9
53.5
48.5
53.1
53.1
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

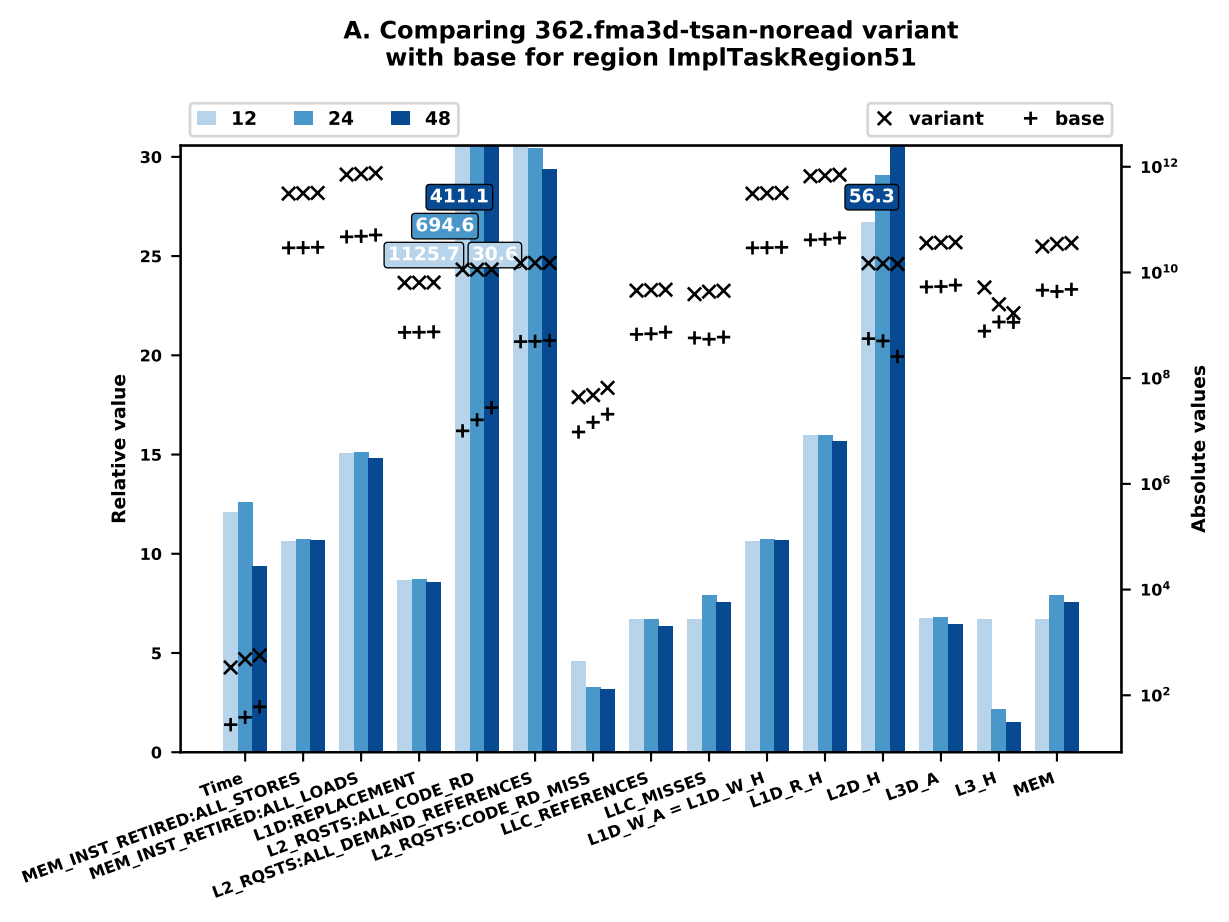

A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion50
12
24
48
variant
base
Relative value
Absolute values
0
10
20
30
40
50
10^1
10^3
10^5
10^7
10^9
69.5
69.1
72.4
72.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

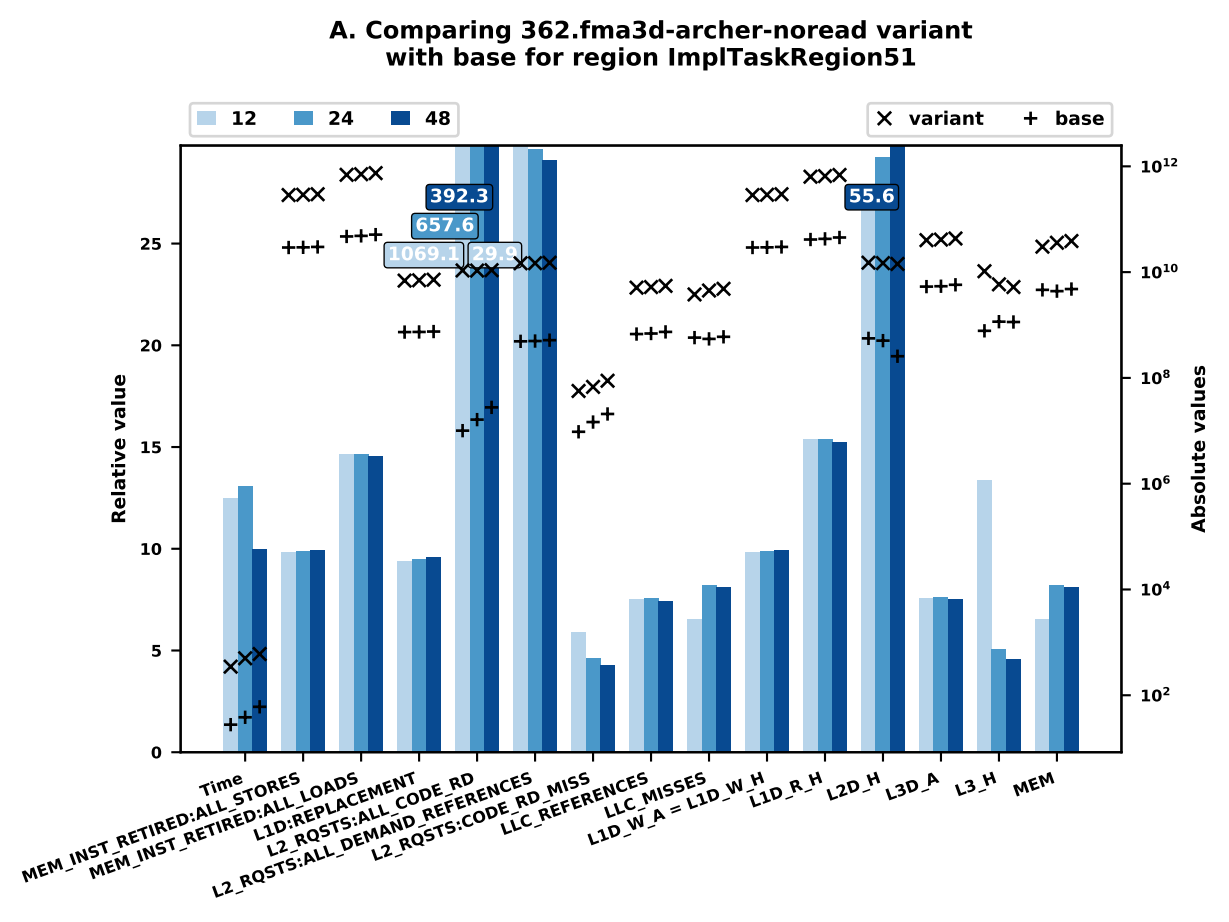

A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion50
12
24
48
variant
base
Relative value
Absolute values
64.1
58.2
54.0
54.0
0
10
20
30
40
10^1
10^3
10^5
10^7
10^9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

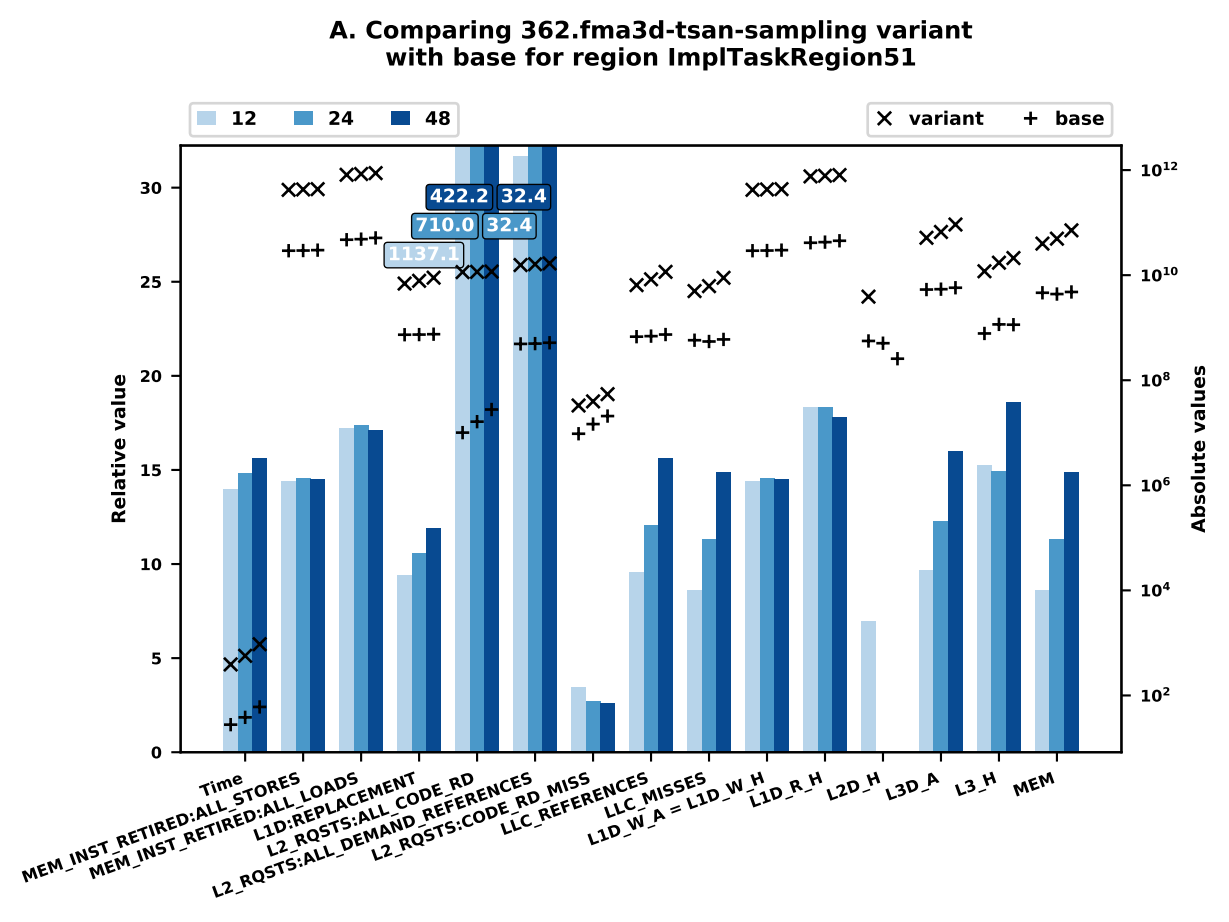

A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion50
12
24
48
variant
base
Relative value
Absolute values
86.9
88.1
72.6
72.6
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

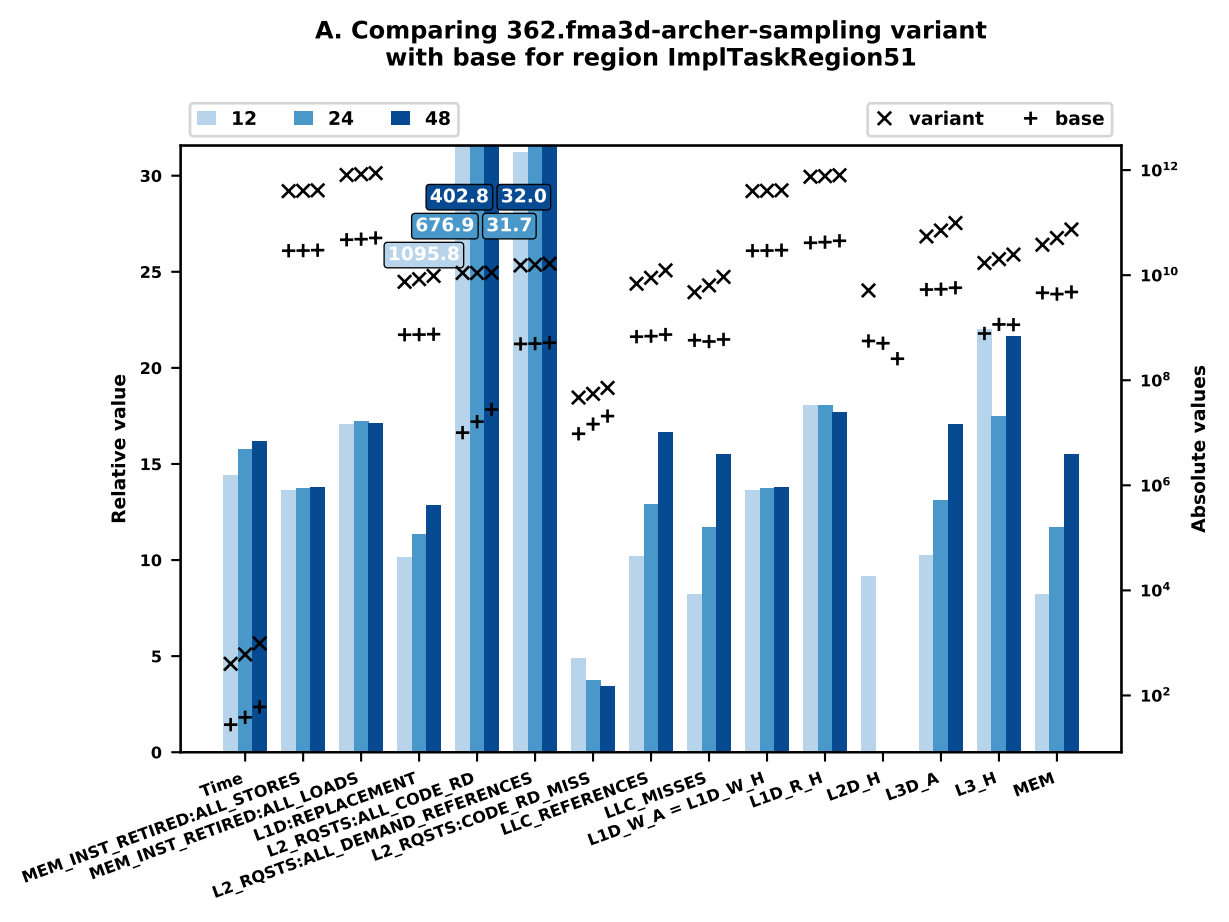

A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion50
12
24
48
variant
base
51.0
48.4
55.2
55.2
Relative value
Absolute values
0
10
20
30
40
10^1
10^3
10^5
10^7
10^9
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

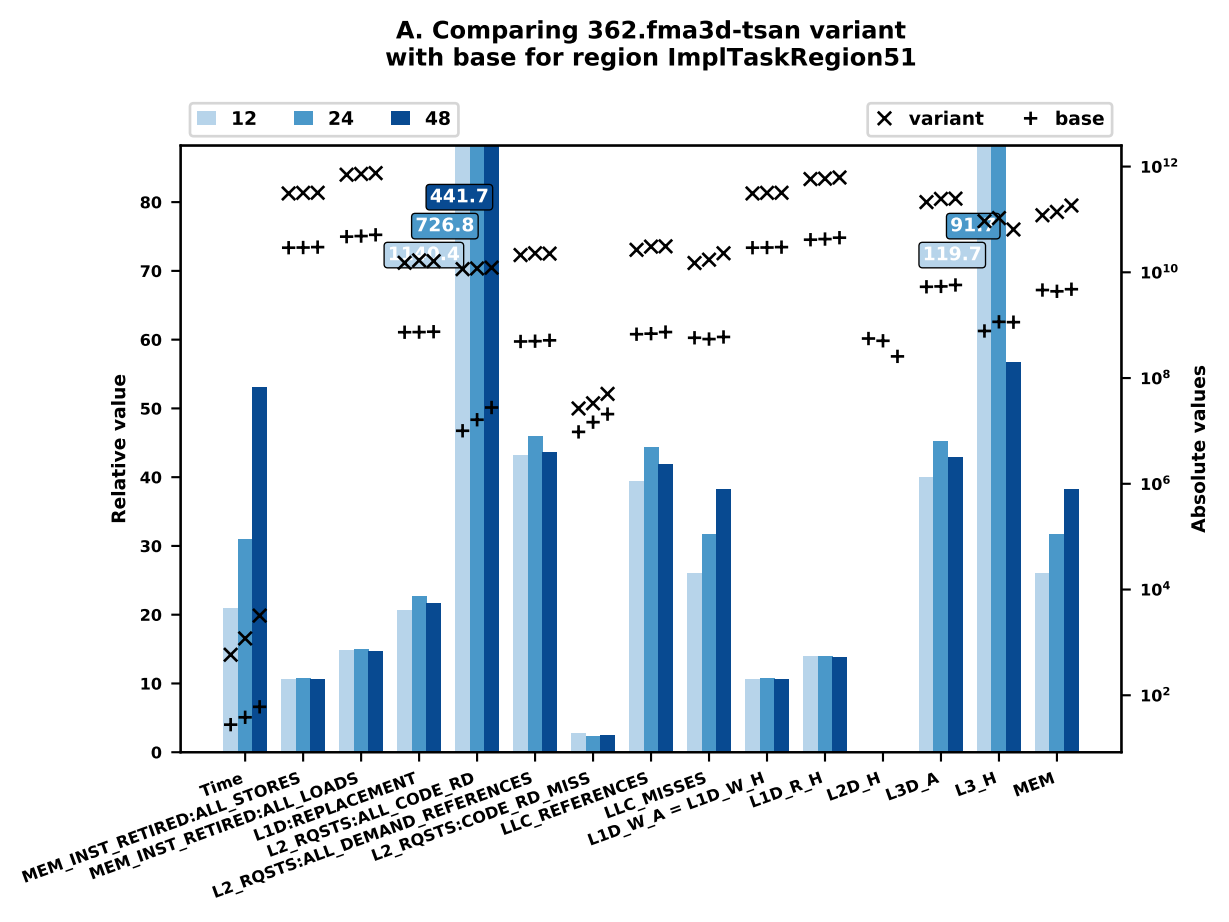

A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion50
12
24
48
variant
base
Relative value
Absolute values
69.3
69.1
72.4
72.4
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM

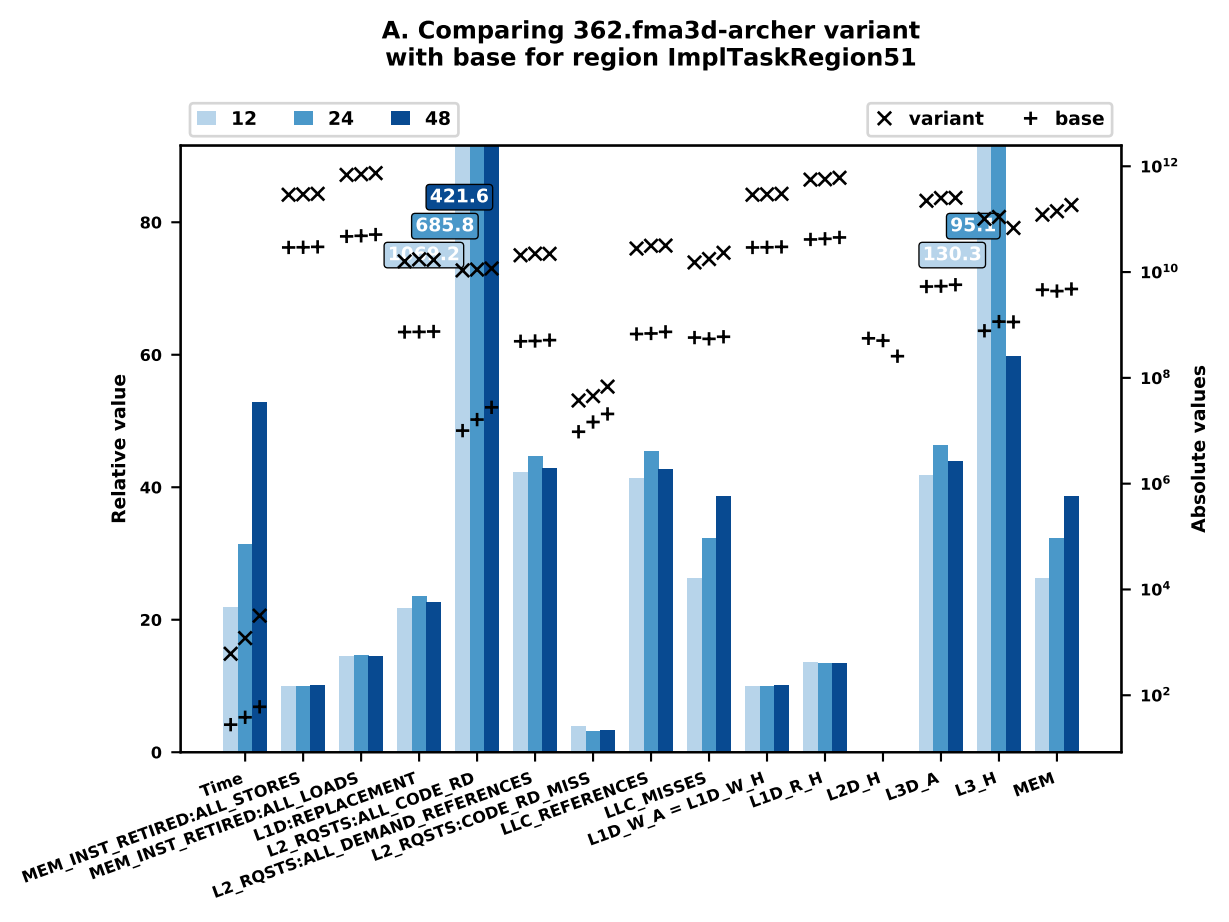

A. Comparing 362.fma3d-tsan-noread variant
with base for region ImplTaskRegion51
12
24
48
variant
base
411.1
694.6
1125.7
30.6
56.3
Relative value
Absolute values
0
5
10
15
20
25
30
10^{2}
10^{4}
10^{6}
10^{8}
10^{10}
10^{12}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM


A. Comparing 362.fma3d-archer-noread variant
with base for region ImplTaskRegion51
12
24
48
variant
base
392.3
657.6
1069.1
29.8
55.6
Relative value
Absolute values
0
5
10
15
20
25
10^{2}
10^{4}
10^{6}
10^{8}
10^{10}
10^{12}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM


A. Comparing 362.fma3d-tsan-sampling variant
with base for region ImplTaskRegion51
12
24
48
variant
base
422.2
32.4
710.0
32.4
1137.1
Relative value
Absolute values
0
5
10
15
20
25
30
10^{2}
10^{4}
10^{6}
10^{8}
10^{10}
10^{12}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM


A. Comparing 362.fma3d-archer-sampling variant
with base for region ImplTaskRegion51
12
24
48
variant
base
Relative value
Absolute values
402.8
32.0
676.9
31.7
1095.8
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM


A. Comparing 362.fma3d-tsan variant
with base for region ImplTaskRegion51
12
24
48
variant
base
Relative value
Absolute values
441.7
726.8
1140.4
91.7
119.7
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM


A. Comparing 362.fma3d-archer variant
with base for region ImplTaskRegion51
12
24
48
variant
base
421.6
685.8
1969.2
95.2
130.3
Relative value
Absolute values
0
20
40
60
80
10^{2}
10^{4}
10^{6}
10^{8}
10^{10}
10^{12}
Time
MEM_INST_RETIRED:ALL_STORES
MEM_INST_RETIRED:ALL_LOADS
L1D:REPLACEMENT
L2_RQSTS:ALL_CODE_RD
L2_RQSTS:ALL_DEMAND_REFERENCES
L2_RQSTS:CODE_RD_MISS
LLC_REFERENCES
LLC_MISSES
L1D_W_A = L1D_W_H
L1D_R_H
L2D_H
L3D_A
L3_H
MEM