Spectre Unprotected

Process	Cycles	Instructions retired	L1 cache misses
Spectre unprotected	36.812.150.319	39.004.064.155	24.515.924

Spectre5

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectre5 (80809)		94.472.782	37.990.445.498	21.365.204
spectre5 (80866)		106.530.587	42.156.008.081	25.080.956
spectre5 (80891)		100.762.328	39.640.400.807	23.383.774
Averages		100.588.565,666667	39.928.951.462	23.276.644,6666667

Spectre10

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectre10 (81078)		113.557.456	42.855.915.916	25.176.296
spectre10 (81094)		107.533.971	42.416.193.492	24.816.471
Averages		110.545.713,5	42.636.054.704	24.996.383,5

Spectre25

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectre25 (81000)		132.935.097	43.543.698.029	24.497.610
spectre25 (81115)		128.823.024	44.495.472.248	25.065.674
spectre25 (81124)		127.972.814	44.496.551.994	25.128.479
Averages		129.910.311,666667	44.178.574.090,3333	24.897.254,3333333

Spectre50

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectre50 (81140)		123.964.690	47.509.365.674	24.931.913
spectre50 (81411)		129.130.119	46.993.495.344	24.919.484
Averages		126.547.404,5	47.251.430.509	24.925.698,5

SpectreNop5

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreNop5 (81331)		80.241.585	34.187.506.371	19.588.605
spectreNop5 (81708)		87.140.479	35.122.370.877	20.329.521
spectreNop5 (81708)		87.140.479	35.122.370.877	20.329.521
Averages		84.840.847,6666667	34.810.749.375	20.082.549

SpectreNop10

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreNop10 (81448)		114.909.607	42.676.246.611	24.783.115
spectreNop10 (81461)		117.139.630	43.426.702.798	25.234.456

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreNop10 (81468)		105.494.840	40.470.505.117	23.402.051
Averages		112.514.692,333333	42.191.151.508,6667	24.473.207,3333333

SpectreNop25

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreNop25 (81485)		121.258.181	40.614.365.957	22.288.488
spectreNop25 (81545)		122.701.640	44.994.832.086	25.121.226
spectreNop25 (81554)		128.181.629	45.091.330.244	25.107.758
Averages		124.047.150	43.566.842.762,3333	24.172.490,6666667

SpectreNop50

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreNop50 (81579)		115.013.853	42.603.350.608	22.211.698
Averages		115.013.853	42.603.350.608	22.211.698

SpectreFence5

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreFence5 (81838)		106.314.732	41.043.101.848	24.445.474
spectreFence5 (81856)		109.253.855	42.420.720.732	25.282.715
spectreFence5 (81864)		109.235.721	42.508.636.084	25.352.773
Averages		108.268.102,666667	41.990.819.554,6667	25.026.987,3333333

SpectreFence10

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreFence10 (81877)		104.034.393	40.191.032.382	23.609.828
Averages		104.034.393	40.191.032.382	23.609.828

SpectreFence25

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreFence25 (82071)		134.195.991	44.517.596.561	25.394.913
spectreFence25 (82080)		131.269.414	44.628.840.048	25.269.047
Averages		132.732.702,5	44.573.218.304,5	25.331.980

SpectreFence50

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreFence50 (82301)		128.520.977	47.545.561.719	25.288.565
spectreFence50 (82109)		113.157.809	48.940.761.662	25.384.284
spectreFence50 (82310)		131.695.343	47.333.921.873	25.319.450
Averages		124.458.043	47.940.081.751,3333	25.330.766,3333333

SpectreLea5

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreLea5 (82127)		91.453.131	37.947.680.262	22.424.820
spectreLea5 (82150)		89.384.004	35.261.616.899	20.792.357
Averages		90.418.567,5	36.604.648.580,5	21.608.588,5

SpectreLea10

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreLea10 (82524)		106.483.174	42.786.231.352	25.041.245
spectreLea10 (82360)		111.568.115	42.924.924.727	25.132.771
spectreLea10 (82524)		106.483.174	42.786.231.352	25.041.245
Averages		108.178.154,333333	42.832.462.477	25.071.753,6666667

SpectreLea25

Process		Branch Mispredictions	Instructions retired	L1 cache misses
spectreLea25 (82592)		122.696.507	44.622.044.697	25.180.625
spectreLea25 (82578)		127.594.647	44.371.319.387	24.846.711
spectreLea25 (82417)		126.505.606	44.556.746.040	25.157.151
Averages		125.598.920	44.516.703.374,6667	25.061.495,6666667

SpectreLea50

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreLea50 (82452)		126.304.815	46.943.865.306	24.776.301

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreLea50 (82462)		124.083.585	45.110.956.548	23.936.586
Averages		125.194.200	46.027.410.927	24.356.443,5

SpectreReorder5

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreReorder5 (82651)		106.348.997	42.302.012.060	25.196.770
spectreReorder5 (82642)		106.699.998	42.329.055.715	25.214.664
spectreReorder5 (82634)		99.442.823	39.214.315.192	23.245.072
Averages		104.163.939,333333	41.281.794.322,3333	24.552.168,6666667

SpectreReorder10

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreReorder10 (82720)		107.252.198	42.392.682.980	24.916.592
spectreReorder10 (82712)		100.311.103	42.844.335.035	25.214.546
spectreReorder10 (82703)		111.285.891	42.863.125.535	25.205.377
Averages		106.283.064	42.700.047.850	25.112.171,6666667

SpectreReorder25

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreReorder25 (83028)		128.956.901	44.584.910.758	25.160.912
spectreReorder25 (83018)		128.863.966	44.441.654.492	25.087.085
spectreReorder25 (83009)		126.559.689	44.257.445.622	24.932.167
Averages		128.126.852	44.428.003.624	25.060.054,6666667

SpectreReorder50

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreReorder50 (83065)		127.707.268	47.332.548.180	25.205.250
spectreReorder50 (83057)		123.657.789	47.396.334.931	25.145.655
spectreReorder50 (83049)		124.346.067	47.520.692.989	25.217.081
Averages		125.237.041,333333	47.416.525.366,6667	25.189.328,6666667

SpectreNoFence5

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreNoFence5 (83148)		110.556.612	42.543.134.106	25.200.928
spectreNoFence5 (83476)		107.202.915	42.422.785.157	25.124.154
spectreNoFence5 (83456)	5	107.508.933	41.974.237.850	24.683.226
spectreNoFence5 (83493)		106.196.972	42.498.209.192	25.184.207
Averages		106.835.003,8	42.271.630.411,2	25.005.099

SpectreNoFence10

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreNoFence10 (83248)		111.618.377	43.151.429.044	25.041.948
spectreNoFence10 (83241)		116.579.896	43.112.149.013	25.085.138
spectreNoFence10 (83425)		114.208.188	43.132.700.026	25.057.163
spectreNoFence10 (83417)		112.281.795	43.091.278.334	25.003.008
spectreNoFence10 (83396)		116.444.722	42.951.359.538	24.936.080
Averages		114.135.487	43.132.092.694,3333	25.061.416,3333333

SpectreNoFence25

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreNoFence25 (83557)		130.725.202	44.864.464.386	25.153.300
spectreNoFence25 (83548)		131.244.598	44.940.012.414	25.076.955
spectreNoFence25 (83540)		130.305.344	44.648.937.023	25.075.003
spectreNoFence25 (83306)		126.687.695	43.763.740.052	24.439.258
Averages		130.758.381,333333	44.817.804.607,6667	25.101.752,6666667

SpectreNoFence50

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreNoFence50 (84085)		128.168.028	47.856.629.074	25.220.283
spectreNoFence50 (84075)		125.493.048	47.886.182.339	25.075.868
spectreNoFence50 (84068)		126.666.707	47.935.421.866	25.270.566
spectreNoFence50 (83736)		126.390.129	47.035.393.192	24.799.823

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
Averages		126.775.927,666667	47.892.744.426,3333	25.188.905,6666667

SpectreAll5

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreAll5 (84132)		108.962.704	42.684.072.158	25.292.371
spectreAll5 (84123)		109.497.300	42.597.817.057	25.236.305
spectreAll5 (84116)		108.112.200	42.548.715.268	25.207.090
spectreAll5 (84106)		107.326.949	42.583.839.416	25.226.783
Averages		108.857.401,333333	42.610.201.494,3333	25.245.255,3333333

SpectreAll10

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreAll10 (84178)		112.465.333	43.118.631.530	25.162.112
spectreAll10 (84171)		112.022.829	43.183.700.819	25.207.858
spectreAll10 (84162)		109.597.707	43.270.438.566	25.258.062
spectreAll10 (84150)		110.506.510	42.384.195.060	24.682.516
Averages		111.361.956,333333	43.190.923.638,3333	25.209.344

SpectreAll25

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreAll25 (84411)		124.910.886	44.998.824.708	25.271.779
spectreAll25 (84402)		123.580.777	45.028.255.731	25.286.766
spectreAll25 (84395)		124.943.862	44.921.904.576	25.211.767
spectreAll25 (84381)		128.776.914	44.843.511.517	25.160.967
Averages		124.478.508,333333	44.982.995.005	25.256.770,6666667

SpectreAll50

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreAll50 (84504)		125.431.152	47.580.545.914	25.009.598
spectreAll50 (84491)		126.179.412	48.109.813.497	25.212.875
spectreAll50 (84483)		125.373.774	48.010.569.664	25.284.164

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses
spectreAll50 (84463)		124.607.828	47.145.363.510	24.910.057
Averages		125.661.446	47.900.309.691,6667	25.168.879

Process	Count (?)	Branch Mispredictions	Instructions retired	L1 cache misses

Process	Branch Mispredictions
Spectre unprotected	6.441.896

Process	Cycles
spectre5 (80809)	39.234.696.832
spectre5 (80866)	45.875.072.673
spectre5 (80891)	42.423.548.898
Averages	42.511.106.134,3333

Process	Cycles
spectre10 (81078)	44.373.114.582
spectre10 (81094)	45.054.518.284
Averages	44.713.816.433

Process	Cycles
spectre25 (81000)	46.810.436.198
spectre25 (81115)	47.356.203.039
spectre25 (81124)	45.870.959.367
Averages	46.679.199.534,6667

Process	Cycles
spectre50 (81140)	45.437.207.375
spectre50 (81411)	45.422.210.030
Averages	45.429.708.702,5

Process	Cycles
spectreNop5 (81331)	34.834.178.309
spectreNop5 (81708)	36.437.132.583
spectreNop5 (81708)	36.437.132.583
Averages	35.902.814.491,6667

Process	Cycles
spectreNop10 (81448)	43.806.313.181
spectreNop10 (81461)	44.639.577.921

Process	Cycles
spectreNop10 (81468)	41.492.765.131
Averages	43.312.885.411

Process	Cycles
spectreNop25 (81485)	42.257.632.414
spectreNop25 (81545)	45.563.163.697
spectreNop25 (81554)	45.851.338.388
Averages	44.557.378.166,3333

Process	Cycles
spectreNop50 (81579)	42.262.412.413
Averages	42.262.412.413

Process	Cycles
spectreFence5 (81838)	44.899.967.951
spectreFence5 (81856)	46.359.735.005
spectreFence5 (81864)	46.452.890.931
Averages	45.904.197.962,3333

Process	Cycles	
spectreFence10 (81877)	44.027.350.563	
Averages	44.027.350.563	

Process	Cycles	
spectreFence25 (82071)	48.357.122.785	
spectreFence25 (82080)	48.285.849.404	
Averages	48.321.486.094,5	

Process	Cycles	
spectreFence50 (82301)	49.017.767.236	
spectreFence50 (82109)	49.375.551.140	
spectreFence50 (82310)	49.003.693.021	
Averages	49.132.337.132,3333	

Process	Cycles	
spectreLea5 (82127)	39.270.596.871	
spectreLea5 (82150)	36.417.618.596	
Averages	37.844.107.733,5	

Process	Cycles	
spectreLea10 (82524)	43.887.596.655	
spectreLea10 (82360)	44.194.224.301	
spectreLea10 (82524)	43.887.596.655	
Averages	43.989.805.870,3333	

Process	Cycles	
spectreLea25 (82592)	45.628.613.145	
spectreLea25 (82578)	46.764.602.974	
spectreLea25 (82417)	45.734.661.910	
Averages	46.042.626.009,6667	

Process	Cycles	
spectreLea50 (82452)	48.217.327.267	

Process	Cycles	
spectreLea50 (82462)	45.295.650.706	
Averages	46.756.488.986,5	

Process	Cycles	
spectreReorder5 (82651)	44.206.786.318	
spectreReorder5 (82642)	44.122.752.791	
spectreReorder5 (82634)	41.872.502.241	
Averages	43.400.680.450	

Process	Cycles	
spectreReorder10 (82720)	43.724.132.391	
spectreReorder10 (82712)	43.930.823.274	
spectreReorder10 (82703)	44.320.696.759	
Averages	43.991.884.141,3333	

Process	Cycles	
spectreReorder25 (83028)	46.010.347.393	
spectreReorder25 (83018)	45.856.340.838	
spectreReorder25 (83009)	45.483.884.992	
Averages	45.783.524.407,6667	

Process	Cycles	
spectreReorder50 (83065)	44.460.986.873	
spectreReorder50 (83057)	44.133.993.768	
spectreReorder50 (83049)	44.109.356.465	
Averages	44.234.779.035,3333	

Process	Cycles	

Process	Cycles	
spectreNoFence5 (83148)	44.156.103.089	
spectreNoFence5 (83476)	43.964.466.043	
spectreNoFence5 (83456)	43.321.637.837	
spectreNoFence5 (83493)	43.943.050.521	
Averages	43.720.249.871	

Process	Cycles	
spectreNoFence10 (83248)	40.169.751.009	
spectreNoFence10 (83241)	40.538.733.337	
spectreNoFence10 (83425)	40.793.745.594	
spectreNoFence10 (83417)	40.218.166.498	
spectreNoFence10 (83396)	40.288.987.724	
Averages	40.500.743.313,3333	

Process	Cycles	
spectreNoFence25 (83557)	45.863.301.534	
spectreNoFence25 (83548)	47.827.269.877	
spectreNoFence25 (83540)	45.614.704.797	
spectreNoFence25 (83306)	44.713.480.979	
Averages	46.435.092.069,3333	

Process	Cycles	
spectreNoFence50 (84085)	43.875.769.641	
spectreNoFence50 (84075)	45.070.693.928	
spectreNoFence50 (84068)	43.363.809.923	
spectreNoFence50 (83736)	44.235.944.971	

Process	Cycles	
Averages	44.103.424.497,3333	

Process	Cycles	
spectreAll5 (84132)	44.887.491.597	
spectreAll5 (84123)	44.788.672.626	
spectreAll5 (84116)	44.708.704.331	
spectreAll5 (84106)	44.681.211.588	
Averages	44.794.956.184,6667	

Process	Cycles	
spectreAll10 (84178)	44.008.933.614	
spectreAll10 (84171)	44.094.018.543	
spectreAll10 (84162)	46.019.698.489	
spectreAll10 (84150)	43.242.403.025	
Averages	44.707.550.215,3333	

Process	Cycles	
spectreAll25 (84411)	46.386.212.631	
spectreAll25 (84402)	46.421.210.137	
spectreAll25 (84395)	48.359.784.853	
spectreAll25 (84381)	48.492.920.286	
Averages	47.055.735.873,6667	

Process	Cycles	
spectreAll50 (84504)	49.182.700.702	
spectreAll50 (84491)	47.803.233.467	
spectreAll50 (84483)	47.846.933.647	

Process	Cycles
spectreAll50 (84463)	47.181.192.552
Averages	48.277.622.605,3333