Verificando arquivos...
Código-fonte do programa: Quicksort_calloc.c
Arquivo de configuração de CPU: MyO3CPU.py --> MyO3CPU.py
Arquivo de configuração de caches e memória: 64KB.py --> MyCaches.py
Arquivo de configuração de sistema: MySystem.py --> MySystem.py

****
* Compilando o programa ...
* g++ -static Quicksort_calloc.c -o Quicksort_calloc
****

****
* Executando o gem5...
* gem5 --outdir=m5out MySimulation.py -c Quicksort_calloc
****

gem5 Simulator System. http://gem5.org
gem5 is copyrighted software; use the --copyright option for details.

gem5 compiled Feb 16 2016 16:35:34
gem5 started Dec 14 2017 19:02:30
gem5 executing on simulacaolse3
command line: gem5 --outdir=m5out MySimulation.py -c Quicksort_calloc

Programa a ser executado: Quicksort_calloc
Global frequency set at 1000000000000 ticks per second
warn: DRAM device capacity (8192 Mbytes) does not match the address range assigned (512 Mbytes)
0: system.remote_gdb.listener: listening for remote gdb on port 7000

---------- Begin Simulation ----------
info: Entering event queue @ 0. Starting simulation...

Vetor
info: Increasing stack size by one page.
9873, 3259, 9416, 10029, 10573, 2801, 12422, 3263, 2783, 9305, 6056, 4640, 10400, 6196, 12352, 13502, 7253, 6798, 5595, 8658, 7208, 11284, 3650, 4763, 10724, 8768, 9318, 13417, 7239, 6427, 5628, 2113, 1038, 44, 3494, 2963, 9197, 7268, 6226, 3332, 1573, 12282, 7972, 11974, 9831, 11677, 1828, 8436, 3475, 7424, 2095, 10683, 10060, 5745, 6799, 5784, 5866, 1117, 4202, 4457, 13896, 1182, 12922, 14934, 7578, 1416, 9249, 1775, 8684, 476, 5107, 1610, 12758, 4432, 13584, 13941, 1109, 412, 7378, 10936, 14188, 9473, 6619, 9249, 6570, 13418, 33, 12436, 5887, 10587, 8246, 11135, 11769, 6168, 2421, 4347, 7585, 11671, 12474, 7621, 12147, 2582, 9231, 1257, 13366, 14167, 199, 5827, 14580, 7577, 1763, 5120, 8402, 14734, 14369, 14972, 13153, 5755, 3761, 10392, 1342, 12007, 6528, 13112, 3175, 301, 8811, 2112, 11972, 12638, 9734, 9119, 6572, 10317, 1729, 4938, 9485, 1928, 10765, 417, 857, 3880, 5537, 9259, 3614, 4907, 9231, 1767, 10662, 4344, 3512, 3356, 1351, 1392, 1468, 10879, 1693, 1632, 4343, 13666, 14270, 5429, 14137, 12194, 747, 866, 2132, 1584, 9146, 4249, 2001, 10003, 8129, 7538, 4262, 11743, 3797, 4846, 4863, 5811, 542, 14727, 9168,

8246, 7471, 1988, 10477, 9164, 9972, 14820, 14182, 594, 11602, 4672, 12788, 3701, 5538, 6272, 5285, 6037, 10521, 7286, 1040, 10002, 6176, 11655, 13098, 9974, 7853, 2961, 7137, 8395, 9040, 1305, 7993, 1511, 3294, 3470, 10675, 4618, 9643, 1210, 5213, 6245, 5882, 3001, 9946, 2772, 9274, 231, 8809, 11147, 13869, 1202, 6150, 5045, 4209, 4248, 6371, 12062, 13561, 4861, 11809, 7601, 6166, 11155, 9112, 812, 14625, 11139, 5431, 9268, 12349, 10644, 6865, 9583, 4997, 8163, 12356, 14271, 14746, 12517, 10419, 13615, 5071, 7921, 10013, 9280, 12169, 7736, 12694, 10730, 12597, 856, 3331, 3764, 12011, 3795, 10928, 2988, 14934, 7711, 3609, 12284, 9707, 10474, 6867, 14705, 3638, 10575, 13976, 3384, 14445, 747, 8352, 4516, 8668, 3365, 13797, 12189, 11101, 2843, 14271, 8699, 3699, 8954, 3815, 710, 12749, 6095, 10051, 12684, 13807, 13660, 1320, 8514, 9134, 14539, 8219, 4124, 10115, 13548, 13861, 912, 5647, 7213, 5428, 5668, 1930, 4225, 2857, 4383, 13421, 8481, 4434, 2120, 2435, 8249, 9183, 6537, 5697, 4234, 4221, 4504, 2894, 11893, 13018, 3380, 11432, 12590, 7505, 12899, 2490, 6366, 13811, 8137, 4931, 10592, 5157, 6861, 6169, 14367, 11244, 4590, 7848, 679, 6711, 10283, 280, 894, 1820, 5977, 11480, 12393, 1833, 14374, 9286, 6204, 2754, 12071, 3794, 1611, 1322, 12636, 14329, 6486, 12125, 4260, 2078, 2283, 2473, 8247, 1650, 5070, 12838, 850, 12101, 10901, 11133, 3733, 3147, 4306, 9711, 14627, 8051, 11544, 14001, 8690, 9100, 8107, 12113, 4246, 9719, 13435, 1882, 9048, 4921, 14008, 4661, 13351, 7643, 13486, 6599, 9293, 3556, 10789, 1495, 657, 6690, 12628, 4391, 1189, 8286, 5454, 816, 7690, 8350, 6169, 1380, 2451, 14276, 13493, 6697, 8995, 11928, 14932, 9396, 8202, 13940, 5409, 6553, 12935, 3895, 4504, 13580, 13804, 293, 75, 14461, 13335, 4055, 10204, 14524, 12342, 7010, 6692, 5032, 6713, 12861, 12764, 9164, 12138, 11257, 7213, 12485, 14537, 7145, 13233, 7739, 12437, 3642, 5645, 1724, 13890, 10149, 304, 12694, 1795, 379, 3507, 130, 4435, 5064, 6007, 8129, 12074, 12699, 4513, 3787, 10561, 2277, 4303, 14051, 4886, 2869, 11536, 4423, 1366, 1122, 12163, 5156, 4764, 2808, 6880, 10006, 4309, 13537, 7700, 6104, 5268, 11208, 12587, 9703, 1272, 3594, 9184, 4698, 7645, 5049, 14838, 9558, 7326, 10493, 8609, 12212, 13362, 11498, 1636, 6081, 12620, 5151, 2589, 8736, 14311, 821, 3743, 3620, 14358, 11443, 1077, 4627, 14003, 13664, 5682, 275, 8610, 6219, 4974, 1255, 11268, 11164, 10814, 9947, 6657, 10775, 7159, 11372, 13625, 147, 8805, 2597, 11650, 11394, 11334, 2313, 12215, 6429, 12286, 2926, 9224, 13363, 13905, 8228, 3379, 10939, 14855, 11989, 2158, 11181, 13244, 4779, 7345, 410, 14726, 5355, 11186, 13237, 1727, 9811, 13385, 10532, 3761, 1387, 13278, 95, 3701, 10493, 12876, 7339, 4771, 13452, 5702, 3676, 6680, 9081, 14616, 12888, 6070, 8126, 421, 10666, 12905, 14119, 11077, 12631, 4474, 13615, 10869, 6201, 14778, 606, 8085, 3539, 8345, 6363, 9986, 3398, 8208, 14214, 10737, 12980, 12667, 7791, 8008, 4347, 8224, 13976, 8587, 14294, 13455, 9009, 1313, 11360, 8128, 3742, 344, 3954, 8709, 11213, 1507, 8487, 3171, 9592, 3379, 11516, 7307, 13365, 14915, 515, 12580, 2004, 4847, 1599, 9796, 4208, 12298, 3020, 9536, 5886, 8667, 7991, 6247, 9980, 4352, 5727, 5074, 4696, 9681, 13783, 7261, 11188, 7270, 1784, 12132, 2001, 4652, 4439, 6719, 10919, 11306, 10651, 12924, 7506, 12250, 7720, 11714, 9548, 10740, 6250, 434, 10759, 14242, 13033, 5739, 9946, 3760, 2165, 5994, 13441, 948, 13255, 981, 8219, 6391, 13113, 1572, 11043, 8904, 8291, 6963, 5211, 3942, 4887, 12717, 1192, 3959, 783, 10741, 6051, 13385, 2527, 1811, 3979, 561, 13902, 13925, 4321, 1068, 4919, 9115, 2016, 9526, 1448, 1587, 917, 14562, 3160, 3313, 14818, 11451, 10276, 11381, 394, 6515, 450, 7938, 1826, 1233, 3679, 7877, 5971, 12559, 1040, 9950, 13120, 6295, 8876, 8793, 7363, 5147, 9260, 731, 14674, 10709, 8671, 6943, 1623, 11831, 10256, 1441, 14634, 11884, 12823, 6380, 9751, 13273, 14319, 11577, 5859, 9350, 10807, 11830, 6909, 3199, 6780, 11381, 9494, 7008, 5175, 8209, 12156, 14435, 8941, 3182, 10144, 2612, 10125, 11767, 5795, 11734, 4561, 5429, 8618, 2384, 3162, 9722, 7009, 2481, 6299, 12868, 3183, 8458, 1050, 1445, 11658, 14183, 12826, 6152, 6191, 9353, 5714, 9699, 8789, 14655, 4233, 10285, 8619, 5711, 13405, 5766, 2445, 2966, 11195, 2415, 11702, 5709, 12137, 10063, 14542, 9789, 14284, 2726, 3247, 334, 4171, 6257, 14517, 8349, 3762, 12061, 2703, 9476, 13112, 11492, 483, 2346, 13129, 9102, 8057, 11534, 14868, 1854, 5852, 2415, 4269, 2554, 8125, 7759, 12618, 14019, 2548, 11902, 1745, 12147, 3588, 12268, 9757, 9458, 5618, 13519, 6519, 8321, 14347, 4631, 11165, 14830,

13329, 9294, 284, 6386, 12181, 6504, 8240, 3033, 271, 3862, 11940, 14748, 11621, 9558, 13768, 5521, 12812, 513, 9020, 7752, 4134, 3777, 2210, 9752, 8648, 81, 9425, 7995, 4713, 5590, 7825, 3042, 14884, 8109, 781, 3417, 5965, 373, 6451, 6237, 4235, 3391, 5985, 856, 4301, 4753, 12729, 8465, 11619, 6750, 1217, 753, 1879, 3428, 1857, 10528, 3509, 11282, 3523, 14574, 1872, 2701, 8969, 8108, 2162, 1102, 11526, 8128, 1475, 2977, 14365, 5711, 12720, 11702, 12919, 2021, 7808, 10649, 10486, 4427, 8751, 11703, 11532, 10630, 6483, 13389, 12510, 1345, 9671, 1034, 919, 2895, 3735, 1240,

Vetor

33, 44, 75, 81, 95, 130, 147, 199, 231, 271, 275, 280, 284, 293, 301, 304, 334, 344, 373, 379, 394, 410, 412, 417, 421, 434, 450, 476, 483, 513, 515, 542, 561, 594, 606, 657, 679, 710, 731, 747, 747, 753, 781, 783, 812, 816, 821, 850, 856, 856, 857, 866, 894, 912, 917, 919, 948, 981, 1034, 1038, 1040, 1040, 1050, 1068, 1077, 1102, 1109, 1117, 1122, 1182, 1189, 1192, 1202, 1210, 1217, 1233, 1240, 1255, 1257, 1272, 1305, 1313, 1320, 1322, 1342, 1345, 1351, 1366, 1380, 1387, 1392, 1416, 1441, 1445, 1448, 1468, 1475, 1495, 1507, 1511, 1572, 1573, 1584, 1587, 1599, 1610, 1611, 1623, 1632, 1636, 1650, 1693, 1724, 1727, 1729, 1745, 1763, 1767, 1775, 1784, 1795, 1811, 1820, 1826, 1828, 1833, 1854, 1857, 1872, 1879, 1882, 1928, 1930, 1988, 2001, 2001, 2004, 2016, 2021, 2078, 2095, 2112, 2113, 2120, 2132, 2158, 2162, 2165, 2210, 2277, 2283, 2313, 2346, 2384, 2415, 2415, 2421, 2435, 2445, 2451, 2473, 2481, 2490, 2527, 2548, 2554, 2582, 2589, 2597, 2612, 2701, 2703, 2726, 2754, 2772, 2783, 2801, 2808, 2843, 2857, 2869, 2894, 2895, 2926, 2961, 2963, 2966, 2977, 2988, 3001, 3020, 3033, 3042, 3147, 3160, 3162, 3171, 3175, 3182, 3183, 3199, 3247, 3259, 3263, 3294, 3313, 3331, 3332, 3356, 3365, 3379, 3379, 3380, 3384, 3391, 3398, 3417, 3428, 3470, 3475, 3494, 3507, 3509, 3512, 3523, 3539, 3556, 3588, 3594, 3609, 3614, 3620, 3638, 3642, 3650, 3676, 3679, 3699, 3701, 3701, 3733, 3735, 3742, 3743, 3760, 3761, 3761, 3762, 3764, 3777, 3787, 3794, 3795, 3797, 3815, 3862, 3880, 3895, 3942, 3954, 3959, 3979, 4055, 4124, 4134, 4171, 4202, 4208, 4209, 4221, 4225, 4233, 4234, 4235, 4246, 4248, 4249, 4260, 4262, 4269, 4301, 4303, 4306, 4309, 4321, 4343, 4344, 4347, 4347, 4352, 4383, 4391, 4423, 4427, 4432, 4434, 4435, 4439, 4457, 4474, 4504, 4504, 4513, 4516, 4561, 4590, 4618, 4627, 4631, 4640, 4652, 4661, 4672, 4696, 4698, 4713, 4753, 4763, 4764, 4771, 4779, 4846, 4847, 4861, 4863, 4886, 4887, 4907, 4919, 4921, 4931, 4938, 4974, 4997, 5032, 5045, 5049, 5064, 5070, 5071, 5074, 5107, 5120, 5147, 5151, 5156, 5157, 5175, 5211, 5213, 5268, 5285, 5355, 5409, 5428, 5429, 5429, 5431, 5454, 5521, 5537, 5538, 5590, 5595, 5618, 5628, 5645, 5647, 5668, 5682, 5697, 5702, 5709, 5711, 5711, 5714, 5727, 5739, 5745, 5755, 5766, 5784, 5795, 5811, 5827, 5852, 5859, 5866, 5882, 5886, 5887, 5965, 5971, 5977, 5985, 5994, 6007, 6037, 6051, 6056, 6070, 6081, 6095, 6104, 6150, 6152, 6166, 6168, 6169, 6169, 6176, 6191, 6196, 6201, 6204, 6219, 6226, 6237, 6245, 6247, 6250, 6257, 6272, 6295, 6299, 6363, 6366, 6371, 6380, 6386, 6391, 6427, 6429, 6451, 6483, 6486, 6504, 6515, 6519, 6528, 6537, 6553, 6570, 6572, 6599, 6619, 6657, 6680, 6690, 6692, 6697, 6711, 6713, 6719, 6750, 6780, 6798, 6799, 6861, 6865, 6867, 6880, 6909, 6943, 6963, 7008, 7009, 7010, 7137, 7145, 7159, 7208, 7213, 7213, 7239, 7253, 7261, 7268, 7270, 7286, 7307, 7326, 7339, 7345, 7363, 7378, 7424, 7471, 7505, 7506, 7538, 7577, 7578, 7585, 7601, 7621, 7643, 7645, 7690, 7700, 7711, 7720, 7736, 7739, 7752, 7759, 7791, 7808, 7825, 7848, 7853, 7877, 7921, 7938, 7972, 7991, 7993, 7995, 8008, 8051, 8057, 8085, 8107, 8108, 8109, 8125, 8126, 8128, 8128, 8129, 8129, 8137, 8163, 8202, 8208, 8209, 8219, 8219, 8224, 8228, 8240, 8246, 8246, 8247, 8249, 8286, 8291, 8321, 8345, 8349, 8350, 8352, 8395, 8402, 8436, 8458, 8465, 8481, 8487, 8514, 8587, 8609, 8610, 8618, 8619, 8648, 8658, 8667, 8668, 8671, 8684, 8690, 8699, 8709, 8736, 8751, 8768, 8789, 8793, 8805, 8809, 8811, 8876, 8904, 8941, 8954, 8969, 8995, 9009, 9020, 9040, 9048, 9081, 9100, 9102, 9112, 9115, 9119, 9134, 9146, 9164, 9164, 9168, 9183, 9184, 9197, 9224, 9231, 9231, 9249, 9249, 9259, 9260, 9268, 9274, 9280, 9286, 9293, 9294, 9305, 9318, 9350, 9353, 9396, 9416, 9425, 9458, 9473, 9476, 9485, 9494, 9526, 9536, 9548, 9558, 9558, 9583, 9592, 9643, 9671, 9681, 9699, 9703, 9707, 9711, 9719, 9722, 9734, 9751, 9752, 9757, 9789,

9796, 9811, 9831, 9873, 9946, 9946, 9947, 9950, 9972, 9974, 9980, 9986, 10002, 10003, 10006, 10013, 10029, 10051, 10060, 10063, 10115, 10125, 10144, 10149, 10204, 10256, 10276, 10283, 10285, 10317, 10392, 10400, 10419, 10474, 10477, 10486, 10493, 10493, 10521, 10528, 10532, 10561, 10573, 10575, 10587, 10592, 10630, 10644, 10649, 10651, 10662, 10666, 10675, 10683, 10709, 10724, 10730, 10737, 10740, 10741, 10759, 10765, 10775, 10789, 10807, 10814, 10869, 10879, 10901, 10919, 10928, 10936, 10939, 11043, 11077, 11101, 11133, 11135, 11139, 11147, 11155, 11164, 11165, 11181, 11186, 11188, 11195, 11208, 11213, 11244, 11257, 11268, 11282, 11284, 11306, 11334, 11360, 11372, 11381, 11381, 11394, 11432, 11443, 11451, 11480, 11492, 11498, 11516, 11526, 11532, 11534, 11536, 11544, 11577, 11602, 11619, 11621, 11650, 11655, 11658, 11671, 11677, 11702, 11702, 11703, 11714, 11734, 11743, 11767, 11769, 11809, 11830, 11831, 11884, 11893, 11902, 11928, 11940, 11972, 11974, 11989, 12007, 12011, 12061, 12062, 12071, 12074, 12101, 12113, 12125, 12132, 12137, 12138, 12147, 12147, 12156, 12163, 12169, 12181, 12189, 12194, 12212, 12215, 12250, 12268, 12282, 12284, 12286, 12298, 12342, 12349, 12352, 12356, 12393, 12422, 12436, 12437, 12474, 12485, 12510, 12517, 12559, 12580, 12587, 12590, 12597, 12618, 12620, 12628, 12631, 12636, 12638, 12667, 12684, 12694, 12694, 12699, 12717, 12720, 12729, 12749, 12758, 12764, 12788, 12812, 12823, 12826, 12838, 12861, 12868, 12876, 12888, 12899, 12905, 12919, 12922, 12924, 12935, 12980, 13018, 13033, 13098, 13112, 13112, 13113, 13120, 13129, 13153, 13233, 13237, 13244, 13255, 13273, 13278, 13329, 13335, 13351, 13362, 13363, 13365, 13366, 13385, 13385, 13389, 13405, 13417, 13418, 13421, 13435, 13441, 13452, 13455, 13486, 13493, 13502, 13519, 13537, 13548, 13561, 13580, 13584, 13615, 13615, 13625, 13660, 13664, 13666, 13768, 13783, 13797, 13804, 13807, 13811, 13861, 13869, 13890, 13896, 13902, 13905, 13925, 13940, 13941, 13976, 13976, 14001, 14003, 14008, 14019, 14051, 14119, 14137, 14167, 14182, 14183, 14188, 14214, 14242, 14270, 14271, 14271, 14276, 14284, 14294, 14311, 14319, 14329, 14347, 14358, 14365, 14367, 14369, 14374, 14435, 14445, 14461, 14517, 14524, 14537, 14539, 14542, 14562, 14574, 14580, 14616, 14625, 14627, 14634, 14655, 14674, 14705, 14726, 14727, 14734, 14746, 14748, 14778, 14818, 14820, 14830, 14838, 14855, 14868, 14884, 14915, 14932, 14934, 14934, 14972,
Finishing simulation. Current tick: 2040937500. Reason: target called exit()
---------- End Simulation ----------
****
* Resultados da simulação
****

sim_seconds 0.002041 # Number of seconds simulated
sim_ticks 2040937500 # Number of ticks simulated
final_tick 2040937500 # Number of ticks from beginning of simulation (restored from checkpoints and never reset)
sim_freq 1000000000000 # Frequency of simulated ticks
host_inst_rate 93462 # Simulator instruction rate (inst/s)
host_op_rate 173499 # Simulator op (including micro ops) rate (op/s)
host_tick_rate 113503250 # Simulator tick rate (ticks/s)
host_mem_usage 645152 # Number of bytes of host memory used
host_seconds 17.98 # Real time elapsed on the host
sim_insts 1680562 # Number of instructions simulated
sim_ops 3119746 # Number of ops (including micro ops) simulated
system.clk_domain.voltage_domain.voltage 1 # Voltage in Volts
system.clk_domain.clock 500 # Clock period in ticks
system.mem_ctrl.bytes_read::cpu.inst 28032 # Number of bytes read from this memory

system.mem_ctrl.bytes_read::cpu.data 21952 # Number of bytes read from this memory
system.mem_ctrl.bytes_read::total 49984 # Number of bytes read from this memory
system.mem_ctrl.bytes_inst_read::cpu.inst 28032 # Number of instructions bytes read from this memory
system.mem_ctrl.bytes_inst_read::total 28032 # Number of instructions bytes read from this memory
system.mem_ctrl.bytes_written::writebacks 448 # Number of bytes written to this memory
system.mem_ctrl.bytes_written::total 448 # Number of bytes written to this memory
system.mem_ctrl.num_reads::cpu.inst 438 # Number of read requests responded to by this memory
system.mem_ctrl.num_reads::cpu.data 343 # Number of read requests responded to by this memory
system.mem_ctrl.num_reads::total 781 # Number of read requests responded to by this memory
system.mem_ctrl.num_writes::writebacks 7 # Number of write requests responded to by this memory
system.mem_ctrl.num_writes::total 7 # Number of write requests responded to by this memory
system.mem_ctrl.bw_read::cpu.inst 13734864 # Total read bandwidth from this memory (bytes/s)
system.mem_ctrl.bw_read::cpu.data 10755841 # Total read bandwidth from this memory (bytes/s)
system.mem_ctrl.bw_read::total 24490706 # Total read bandwidth from this memory (bytes/s)
system.mem_ctrl.bw_inst_read::cpu.inst 13734864 # Instruction read bandwidth from this memory (bytes/s)
system.mem_ctrl.bw_inst_read::total 13734864 # Instruction read bandwidth from this memory (bytes/s)
system.mem_ctrl.bw_write::writebacks 219507 # Write bandwidth from this memory (bytes/s)
system.mem_ctrl.bw_write::total 219507 # Write bandwidth from this memory (bytes/s)
system.mem_ctrl.bw_total::writebacks 219507 # Total bandwidth to/from this memory (bytes/s)
system.mem_ctrl.bw_total::cpu.inst 13734864 # Total bandwidth to/from this memory (bytes/s)
system.mem_ctrl.bw_total::cpu.data 10755841 # Total bandwidth to/from this memory (bytes/s)
system.mem_ctrl.bw_total::total 24710213 # Total bandwidth to/from this memory (bytes/s)
system.mem_ctrl.readReqs 781 # Number of read requests accepted
system.mem_ctrl.writeReqs 7 # Number of write requests accepted
system.mem_ctrl.readBursts 781 # Number of DRAM read bursts, including those serviced by the write queue
system.mem_ctrl.writeBursts 7 # Number of DRAM write bursts, including those merged in the write queue
system.mem_ctrl.bytesReadDRAM 49984 # Total number of bytes read from DRAM
system.mem_ctrl.bytesReadWrQ 0 # Total number of bytes read from write queue
system.mem_ctrl.bytesWritten 0 # Total number of bytes written to DRAM
system.mem_ctrl.bytesReadSys 49984 # Total read bytes from the system interface side
system.mem_ctrl.bytesWrittenSys 448 # Total written bytes from the system interface side
system.mem_ctrl.servicedByWrQ 0 # Number of DRAM read bursts serviced by the write queue
system.mem_ctrl.mergedWrBursts 0 # Number of DRAM write bursts merged with an existing one
system.mem_ctrl.neitherReadNorWriteReqs 0 # Number of requests that are neither read nor write
system.mem_ctrl.perBankRdBursts::0 75 # Per bank write bursts
system.mem_ctrl.perBankRdBursts::1 123 # Per bank write bursts
system.mem_ctrl.perBankRdBursts::2 74 # Per bank write bursts
system.mem_ctrl.perBankRdBursts::3 60 # Per bank write bursts
system.mem_ctrl.perBankRdBursts::4 73 # Per bank write bursts
system.mem_ctrl.perBankRdBursts::5 36 # Per bank write bursts

system.mem_ctrl.perBankRdBursts::6 140 # Per bank write bursts
system.mem_ctrl.perBankRdBursts::7 44 # Per bank write bursts
system.mem_ctrl.perBankRdBursts::8 12 # Per bank write bursts
system.mem_ctrl.perBankRdBursts::9 36 # Per bank write bursts
system.mem_ctrl.perBankRdBursts::10 28 # Per bank write bursts
system.mem_ctrl.perBankRdBursts::11 14 # Per bank write bursts
system.mem_ctrl.perBankRdBursts::12 27 # Per bank write bursts
system.mem_ctrl.perBankRdBursts::13 32 # Per bank write bursts
system.mem_ctrl.perBankRdBursts::14 5 # Per bank write bursts
system.mem_ctrl.perBankRdBursts::15 2 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::0 0 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::1 0 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::2 0 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::3 0 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::4 0 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::5 0 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::6 0 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::7 0 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::8 0 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::9 0 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::10 0 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::11 0 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::12 0 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::13 0 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::14 0 # Per bank write bursts
system.mem_ctrl.perBankWrBursts::15 0 # Per bank write bursts
system.mem_ctrl.numRdRetry 0 # Number of times read queue was full causing retry
system.mem_ctrl.numWrRetry 0 # Number of times write queue was full causing retry
system.mem_ctrl.totGap 2040849500 # Total gap between requests
system.mem_ctrl.readPktSize::0 0 # Read request sizes (log2)
system.mem_ctrl.readPktSize::1 0 # Read request sizes (log2)
system.mem_ctrl.readPktSize::2 0 # Read request sizes (log2)
system.mem_ctrl.readPktSize::3 0 # Read request sizes (log2)
system.mem_ctrl.readPktSize::4 0 # Read request sizes (log2)
system.mem_ctrl.readPktSize::5 0 # Read request sizes (log2)
system.mem_ctrl.readPktSize::6 781 # Read request sizes (log2)
system.mem_ctrl.writePktSize::0 0 # Write request sizes (log2)
system.mem_ctrl.writePktSize::1 0 # Write request sizes (log2)
system.mem_ctrl.writePktSize::2 0 # Write request sizes (log2)
system.mem_ctrl.writePktSize::3 0 # Write request sizes (log2)
system.mem_ctrl.writePktSize::4 0 # Write request sizes (log2)
system.mem_ctrl.writePktSize::5 0 # Write request sizes (log2)
system.mem_ctrl.writePktSize::6 7 # Write request sizes (log2)
system.mem_ctrl.rdQLenPdf::0 582 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::1 154 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::2 39 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::3 6 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::4 0 # What read queue length does an incoming req see

system.mem_ctrl.rdQLenPdf::5 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::6 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::7 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::8 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::9 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::10 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::11 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::12 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::13 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::14 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::15 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::16 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::17 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::18 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::19 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::20 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::21 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::22 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::23 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::24 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::25 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::26 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::27 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::28 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::29 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::30 0 # What read queue length does an incoming req see
system.mem_ctrl.rdQLenPdf::31 0 # What read queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::0 1 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::1 1 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::2 1 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::3 1 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::4 1 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::5 1 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::6 1 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::7 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::8 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::9 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::10 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::11 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::12 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::13 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::14 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::15 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::16 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::17 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::18 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::19 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::20 0 # What write queue length does an incoming req see

system.mem_ctrl.wrQLenPdf::21 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::22 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::23 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::24 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::25 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::26 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::27 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::28 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::29 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::30 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::31 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::32 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::33 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::34 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::35 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::36 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::37 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::38 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::39 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::40 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::41 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::42 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::43 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::44 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::45 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::46 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::47 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::48 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::49 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::50 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::51 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::52 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::53 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::54 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::55 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::56 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::57 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::58 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::59 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::60 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::61 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::62 0 # What write queue length does an incoming req see
system.mem_ctrl.wrQLenPdf::63 0 # What write queue length does an incoming req see
system.mem_ctrl.bytesPerActivate::samples 247 # Bytes accessed per row activation
system.mem_ctrl.bytesPerActivate::mean 199.255061 # Bytes accessed per row activation
system.mem_ctrl.bytesPerActivate::gmean 119.552656 # Bytes accessed per row activation
system.mem_ctrl.bytesPerActivate::stdev 253.871670 # Bytes accessed per row activation
system.mem_ctrl.bytesPerActivate::0-127 150 60.73% 60.73% # Bytes accessed per row activation

system.mem_ctrl.bytesPerActivate::128-255 36 14.57% 75.30% # Bytes accessed per row activation
system.mem_ctrl.bytesPerActivate::256-383 23 9.31% 84.62% # Bytes accessed per row activation
system.mem_ctrl.bytesPerActivate::384-511 9 3.64% 88.26% # Bytes accessed per row activation
system.mem_ctrl.bytesPerActivate::512-639 6 2.43% 90.69% # Bytes accessed per row activation
system.mem_ctrl.bytesPerActivate::640-767 7 2.83% 93.52% # Bytes accessed per row activation
system.mem_ctrl.bytesPerActivate::768-895 1 0.40% 93.93% # Bytes accessed per row activation
system.mem_ctrl.bytesPerActivate::896-1023 4 1.62% 95.55% # Bytes accessed per row activation
system.mem_ctrl.bytesPerActivate::1024-1151 11 4.45% 100.00% # Bytes accessed per row activation
system.mem_ctrl.bytesPerActivate::total 247 # Bytes accessed per row activation
system.mem_ctrl.totQLat 7532000 # Total ticks spent queuing
system.mem_ctrl.totMemAccLat 22175750 # Total ticks spent from burst creation until serviced by the DRAM
system.mem_ctrl.totBusLat 3905000 # Total ticks spent in databus transfers
system.mem_ctrl.avgQLat 9644.05 # Average queueing delay per DRAM burst
system.mem_ctrl.avgBusLat 5000.00 # Average bus latency per DRAM burst
system.mem_ctrl.avgMemAccLat 28394.05 # Average memory access latency per DRAM burst
system.mem_ctrl.avgRdBW 24.49 # Average DRAM read bandwidth in MiByte/s
system.mem_ctrl.avgWrBW 0.00 # Average achieved write bandwidth in MiByte/s
system.mem_ctrl.avgRdBWSys 24.49 # Average system read bandwidth in MiByte/s
system.mem_ctrl.avgWrBWSys 0.22 # Average system write bandwidth in MiByte/s
system.mem_ctrl.peakBW 12800.00 # Theoretical peak bandwidth in MiByte/s
system.mem_ctrl.busUtil 0.19 # Data bus utilization in percentage
system.mem_ctrl.busUtilRead 0.19 # Data bus utilization in percentage for reads
system.mem_ctrl.busUtilWrite 0.00 # Data bus utilization in percentage for writes
system.mem_ctrl.avgRdQLen 1.01 # Average read queue length when enqueuing
system.mem_ctrl.avgWrQLen 3.86 # Average write queue length when enqueuing
system.mem_ctrl.readRowHits 530 # Number of row buffer hits during reads
system.mem_ctrl.writeRowHits 0 # Number of row buffer hits during writes
system.mem_ctrl.readRowHitRate 67.86 # Row buffer hit rate for reads
system.mem_ctrl.writeRowHitRate 0.00 # Row buffer hit rate for writes
system.mem_ctrl.avgGap 2589910.53 # Average gap between requests
system.mem_ctrl.pageHitRate 67.26 # Row buffer hit rate, read and write combined
system.mem_ctrl_0.actEnergy 1512000 # Energy for activate commands per rank (pJ)
system.mem_ctrl_0.preEnergy 825000 # Energy for precharge commands per rank (pJ)
system.mem_ctrl_0.readEnergy 4820400 # Energy for read commands per rank (pJ)
system.mem_ctrl_0.writeEnergy 0 # Energy for write commands per rank (pJ)
system.mem_ctrl_0.refreshEnergy 133242720 # Energy for refresh commands per rank (pJ)
system.mem_ctrl_0.actBackEnergy 363966660 # Energy for active background per rank (pJ)
system.mem_ctrl_0.preBackEnergy 904885500 # Energy for precharge background per rank (pJ)
system.mem_ctrl_0.totalEnergy 1409252280 # Total energy per rank (pJ)
system.mem_ctrl_0.averagePower 690.722754 # Core power per rank (mW)
system.mem_ctrl_0.memoryStateTime::IDLE 1502898250 # Time in different power states
system.mem_ctrl_0.memoryStateTime::REF 68120000 # Time in different power states
system.mem_ctrl_0.memoryStateTime::PRE_PDN 0 # Time in different power states
system.mem_ctrl_0.memoryStateTime::ACT 469253000 # Time in different power states
system.mem_ctrl_0.memoryStateTime::ACT_PDN 0 # Time in different power states
system.mem_ctrl_1.actEnergy 355320 # Energy for activate commands per rank (pJ)

system.mem_ctrl_1.preEnergy 193875 # Energy for precharge commands per rank (pJ)
system.mem_ctrl_1.readEnergy 1177800 # Energy for read commands per rank (pJ)
system.mem_ctrl_1.writeEnergy 0 # Energy for write commands per rank (pJ)
system.mem_ctrl_1.refreshEnergy 133242720 # Energy for refresh commands per rank (pJ)
system.mem_ctrl_1.actBackEnergy 71759295 # Energy for active background per rank (pJ)
system.mem_ctrl_1.preBackEnergy 1161207750 # Energy for precharge background per rank (pJ)
system.mem_ctrl_1.totalEnergy 1367936760 # Total energy per rank (pJ)
system.mem_ctrl_1.averagePower 670.472605 # Core power per rank (mW)
system.mem_ctrl_1.memoryStateTime::IDLE 1931754000 # Time in different power states
system.mem_ctrl_1.memoryStateTime::REF 68120000 # Time in different power states
system.mem_ctrl_1.memoryStateTime::PRE_PDN 0 # Time in different power states
system.mem_ctrl_1.memoryStateTime::ACT 40492500 # Time in different power states
system.mem_ctrl_1.memoryStateTime::ACT_PDN 0 # Time in different power states
system.cpu.branchPred.lookups 385459 # Number of BP lookups
system.cpu.branchPred.condPredicted 385459 # Number of conditional branches predicted
system.cpu.branchPred.condIncorrect 13975 # Number of conditional branches incorrect
system.cpu.branchPred.BTBLookups 259464 # Number of BTB lookups
system.cpu.branchPred.BTBHits 212138 # Number of BTB hits
system.cpu.branchPred.BTBCorrect 0 # Number of correct BTB predictions (this stat may not work properly.
system.cpu.branchPred.BTBHitPct 81.760090 # BTB Hit Percentage
system.cpu.branchPred.usedRAS 25640 # Number of times the RAS was used to get a target.
system.cpu.branchPred.RASInCorrect 124 # Number of incorrect RAS predictions.
system.cpu.apic_clk_domain.clock 8000 # Clock period in ticks
system.cpu.workload.num_syscalls 14 # Number of system calls
system.cpu.numCycles 4081876 # number of cpu cycles simulated
system.cpu.numWorkItemsStarted 0 # number of work items this cpu started
system.cpu.numWorkItemsCompleted 0 # number of work items this cpu completed
system.cpu.fetch.icacheStallCycles 2478904 # Number of cycles fetch is stalled on an Icache miss
system.cpu.fetch.Insts 1955254 # Number of instructions fetch has processed
system.cpu.fetch.Branches 385459 # Number of branches that fetch encountered
system.cpu.fetch.predictedBranches 237778 # Number of branches that fetch has predicted taken
system.cpu.fetch.Cycles 1560497 # Number of cycles fetch has run and was not squashing or blocked
system.cpu.fetch.SquashCycles 28143 # Number of cycles fetch has spent squashing
system.cpu.fetch.MiscStallCycles 46 # Number of cycles fetch has spent waiting on interrupts, or bad addresses, or out of MSHRs
system.cpu.fetch.PendingTrapStallCycles 678 # Number of stall cycles due to pending traps
system.cpu.fetch.PendingQuiesceStallCycles 13 # Number of stall cycles due to pending quiesce instructions
system.cpu.fetch.CacheLines 639786 # Number of cache lines fetched
system.cpu.fetch.IcacheSquashes 4869 # Number of outstanding Icache misses that were squashed
system.cpu.fetch.rateDist::samples 4054209 # Number of instructions fetched each cycle (Total)
system.cpu.fetch.rateDist::mean 0.884096 # Number of instructions fetched each cycle (Total)
system.cpu.fetch.rateDist::stdev 1.295088 # Number of instructions fetched each cycle (Total)
system.cpu.fetch.rateDist::underflows 0 0.00% 0.00% # Number of instructions fetched each cycle (Total)
system.cpu.fetch.rateDist::0 2656212 65.52% 65.52% # Number of instructions fetched each cycle

(Total)
system.cpu.fetch.rateDist::1 217619 5.37% 70.89% # Number of instructions fetched each cycle (Total)
system.cpu.fetch.rateDist::2 174444 4.30% 75.19% # Number of instructions fetched each cycle (Total)
system.cpu.fetch.rateDist::3 1005934 24.81% 100.00% # Number of instructions fetched each cycle (Total)
system.cpu.fetch.rateDist::overflows 0 0.00% 100.00% # Number of instructions fetched each cycle (Total)
system.cpu.fetch.rateDist::min_value 0 # Number of instructions fetched each cycle (Total)
system.cpu.fetch.rateDist::max_value 3 # Number of instructions fetched each cycle (Total)
system.cpu.fetch.rateDist::total 4054209 # Number of instructions fetched each cycle (Total)
system.cpu.fetch.branchRate 0.094432 # Number of branch fetches per cycle
system.cpu.fetch.rate 0.479009 # Number of inst fetches per cycle
system.cpu.decode.IdleCycles 2462031 # Number of cycles decode is idle
system.cpu.decode.BlockedCycles 256965 # Number of cycles decode is blocked
system.cpu.decode.RunCycles 1269678 # Number of cycles decode is running
system.cpu.decode.UnblockCycles 51464 # Number of cycles decode is unblocking
system.cpu.decode.SquashCycles 14071 # Number of cycles decode is squashing
system.cpu.decode.DecodedInsts 3420868 # Number of instructions handled by decode
system.cpu.decode.SquashedInsts 34957 # Number of squashed instructions handled by decode
system.cpu.rename.SquashCycles 14071 # Number of cycles rename is squashing
system.cpu.rename.IdleCycles 2510942 # Number of cycles rename is idle
system.cpu.rename.BlockCycles 177412 # Number of cycles rename is blocking
system.cpu.rename.serializeStallCycles 534 # count of cycles rename stalled for serializing inst
system.cpu.rename.RunCycles 1263499 # Number of cycles rename is running
system.cpu.rename.UnblockCycles 87751 # Number of cycles rename is unblocking
system.cpu.rename.RenamedInsts 3376028 # Number of instructions processed by rename
system.cpu.rename.SquashedInsts 24771 # Number of squashed instructions processed by rename
system.cpu.rename.ROBFullEvents 61423 # Number of times rename has blocked due to ROB full
system.cpu.rename.IQFullEvents 4326 # Number of times rename has blocked due to IQ full
system.cpu.rename.SQFullEvents 10327 # Number of times rename has blocked due to SQ full
system.cpu.rename.RenamedOperands 4025213 # Number of destination operands rename has renamed
system.cpu.rename.RenameLookups 8694766 # Number of register rename lookups that rename has made
system.cpu.rename.int_rename_lookups 5004085 # Number of integer rename lookups
system.cpu.rename.fp_rename_lookups 156448 # Number of floating rename lookups
system.cpu.rename.CommittedMaps 3700162 # Number of HB maps that are committed
system.cpu.rename.UndoneMaps 325051 # Number of HB maps that are undone due to squashing
system.cpu.rename.serializingInsts 23 # count of serializing insts renamed
system.cpu.rename.tempSerializingInsts 24 # count of temporary serializing insts renamed
system.cpu.rename.skidInsts 122287 # count of insts added to the skid buffer
system.cpu.memDep0.insertedLoads 504954 # Number of loads inserted to the mem dependence unit.
system.cpu.memDep0.insertedStores 255294 # Number of stores inserted to the mem dependence unit.
system.cpu.memDep0.conflictingLoads 75948 # Number of conflicting loads.

system.cpu.memDep0.conflictingStores 12922 # Number of conflicting stores.
system.cpu.iq.iqInstsAdded 3356699 # Number of instructions added to the IQ (excludes non-spec)
system.cpu.iq.iqNonSpecInstsAdded 68 # Number of non-speculative instructions added to the IQ
system.cpu.iq.iqInstsIssued 3281488 # Number of instructions issued
system.cpu.iq.iqSquashedInstsIssued 4248 # Number of squashed instructions issued
system.cpu.iq.iqSquashedInstsExamined 237021 # Number of squashed instructions iterated over during squash; mainly for profiling
system.cpu.iq.iqSquashedOperandsExamined 286837 # Number of squashed operands that are examined and possibly removed from graph
system.cpu.iq.iqSquashedNonSpecRemoved 53 # Number of squashed non-spec instructions that were removed
system.cpu.iq.issued_per_cycle::samples 4054209 # Number of insts issued each cycle
system.cpu.iq.issued_per_cycle::mean 0.809403 # Number of insts issued each cycle
system.cpu.iq.issued_per_cycle::stdev 0.999289 # Number of insts issued each cycle
system.cpu.iq.issued_per_cycle::underflows 0 0.00% 0.00% # Number of insts issued each cycle
system.cpu.iq.issued_per_cycle::0 2200986 54.29% 54.29% # Number of insts issued each cycle
system.cpu.iq.issued_per_cycle::1 700638 17.28% 71.57% # Number of insts issued each cycle
system.cpu.iq.issued_per_cycle::2 884461 21.82% 93.39% # Number of insts issued each cycle
system.cpu.iq.issued_per_cycle::3 260568 6.43% 99.81% # Number of insts issued each cycle
system.cpu.iq.issued_per_cycle::4 7556 0.19% 100.00% # Number of insts issued each cycle
system.cpu.iq.issued_per_cycle::overflows 0 0.00% 100.00% # Number of insts issued each cycle
system.cpu.iq.issued_per_cycle::min_value 0 # Number of insts issued each cycle
system.cpu.iq.issued_per_cycle::max_value 4 # Number of insts issued each cycle
system.cpu.iq.issued_per_cycle::total 4054209 # Number of insts issued each cycle
system.cpu.iq.fu_full::No_OpClass 0 0.00% 0.00% # attempts to use FU when none available
system.cpu.iq.fu_full::IntAlu 386547 70.80% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::IntMult 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::IntDiv 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::FloatAdd 17 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::FloatCmp 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::FloatCvt 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::FloatMult 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::FloatDiv 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::FloatSqrt 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdAdd 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdAddAcc 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdAlu 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdCmp 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdCvt 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdMisc 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdMult 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdMultAcc 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdShift 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdShiftAcc 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdSqrt 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdFloatAdd 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdFloatAlu 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdFloatCmp 0 0.00% 70.80% # attempts to use FU when none available

system.cpu.iq.fu_full::SimdFloatCvt 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdFloatDiv 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdFloatMisc 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdFloatMult 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdFloatMultAcc 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::SimdFloatSqrt 0 0.00% 70.80% # attempts to use FU when none available
system.cpu.iq.fu_full::MemRead 119026 21.80% 92.60% # attempts to use FU when none available
system.cpu.iq.fu_full::MemWrite 40413 7.40% 100.00% # attempts to use FU when none available
system.cpu.iq.fu_full::IprAccess 0 0.00% 100.00% # attempts to use FU when none available
system.cpu.iq.fu_full::InstPrefetch 0 0.00% 100.00% # attempts to use FU when none available
system.cpu.iq.FU_type_0::No_OpClass 14209 0.43% 0.43% # Type of FU issued
system.cpu.iq.FU_type_0::IntAlu 2447331 74.58% 75.01% # Type of FU issued
system.cpu.iq.FU_type_0::IntMult 10674 0.33% 75.34% # Type of FU issued
system.cpu.iq.FU_type_0::IntDiv 28 0.00% 75.34% # Type of FU issued
system.cpu.iq.FU_type_0::FloatAdd 72188 2.20% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::FloatCmp 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::FloatCvt 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::FloatMult 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::FloatDiv 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::FloatSqrt 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdAdd 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdAddAcc 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdAlu 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdCmp 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdCvt 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdMisc 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdMult 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdMultAcc 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdShift 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdShiftAcc 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdSqrt 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdFloatAdd 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdFloatAlu 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdFloatCmp 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdFloatCvt 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdFloatDiv 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdFloatMisc 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdFloatMult 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdFloatMultAcc 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::SimdFloatSqrt 0 0.00% 77.54% # Type of FU issued
system.cpu.iq.FU_type_0::MemRead 489240 14.91% 92.45% # Type of FU issued
system.cpu.iq.FU_type_0::MemWrite 247818 7.55% 100.00% # Type of FU issued
system.cpu.iq.FU_type_0::IprAccess 0 0.00% 100.00% # Type of FU issued
system.cpu.iq.FU_type_0::InstPrefetch 0 0.00% 100.00% # Type of FU issued
system.cpu.iq.FU_type_0::total 3281488 # Type of FU issued
system.cpu.iq.rate 0.803917 # Inst issue rate
system.cpu.iq.fu_busy_cnt 546003 # FU busy when requested
system.cpu.iq.fu_busy_rate 0.166389 # FU busy rate (busy events/executed inst)

system.cpu.iq.int_inst_queue_reads 10978875 # Number of integer instruction queue reads
system.cpu.iq.int_inst_queue_writes 3501472 # Number of integer instruction queue writes
system.cpu.iq.int_inst_queue_wakeup_accesses 3160697 # Number of integer instruction queue wakeup accesses
system.cpu.iq.fp_inst_queue_reads 188561 # Number of floating instruction queue reads
system.cpu.iq.fp_inst_queue_writes 92371 # Number of floating instruction queue writes
system.cpu.iq.fp_inst_queue_wakeup_accesses 92242 # Number of floating instruction queue wakeup accesses
system.cpu.iq.int_alu_accesses 3716980 # Number of integer alu accesses
system.cpu.iq.fp_alu_accesses 96302 # Number of floating point alu accesses
system.cpu.iew.lsq.thread0.forwLoads 38430 # Number of loads that had data forwarded from stores
system.cpu.iew.lsq.thread0.invAddrLoads 0 # Number of loads ignored due to an invalid address
system.cpu.iew.lsq.thread0.squashedLoads 57826 # Number of loads squashed
system.cpu.iew.lsq.thread0.ignoredResponses 64 # Number of memory responses ignored because the instruction is squashed
system.cpu.iew.lsq.thread0.memOrderViolation 55 # Number of memory ordering violations
system.cpu.iew.lsq.thread0.squashedStores 10167 # Number of stores squashed
system.cpu.iew.lsq.thread0.invAddrSwpfs 0 # Number of software prefetches ignored due to an invalid address
system.cpu.iew.lsq.thread0.blockedLoads 0 # Number of blocked loads due to partial load-store forwarding
system.cpu.iew.lsq.thread0.rescheduledLoads 1 # Number of loads that were rescheduled
system.cpu.iew.lsq.thread0.cacheBlocked 9 # Number of times an access to memory failed due to the cache being blocked
system.cpu.iew.iewIdleCycles 0 # Number of cycles IEW is idle
system.cpu.iew.iewSquashCycles 14071 # Number of cycles IEW is squashing
system.cpu.iew.iewBlockCycles 55933 # Number of cycles IEW is blocking
system.cpu.iew.iewUnblockCycles 3660 # Number of cycles IEW is unblocking
system.cpu.iew.iewDispatchedInsts 3356767 # Number of instructions dispatched to IQ
system.cpu.iew.iewDispSquashedInsts 0 # Number of squashed instructions skipped by dispatch
system.cpu.iew.iewDispLoadInsts 504954 # Number of dispatched load instructions
system.cpu.iew.iewDispStoreInsts 255294 # Number of dispatched store instructions
system.cpu.iew.iewDispNonSpecInsts 24 # Number of dispatched non-speculative instructions
system.cpu.iew.iewIQFullEvents 14 # Number of times the IQ has become full, causing a stall
system.cpu.iew.iewLSQFullEvents 3626 # Number of times the LSQ has become full, causing a stall
system.cpu.iew.memOrderViolationEvents 55 # Number of memory order violations
system.cpu.iew.predictedTakenIncorrect 8813 # Number of branches that were predicted taken incorrectly
system.cpu.iew.predictedNotTakenIncorrect 5548 # Number of branches that were predicted not taken incorrectly
system.cpu.iew.branchMispredicts 14361 # Number of branch mispredicts detected at execute
system.cpu.iew.iewExecutedInsts 3264357 # Number of executed instructions
system.cpu.iew.iewExecLoadInsts 482038 # Number of load instructions executed
system.cpu.iew.iewExecSquashedInsts 17131 # Number of squashed instructions skipped in execute
system.cpu.iew.exec_swp 0 # number of swp insts executed
system.cpu.iew.exec_nop 0 # number of nop insts executed
system.cpu.iew.exec_refs 728712 # number of memory reference insts executed

system.cpu.iew.exec_branches 352991 # Number of branches executed
system.cpu.iew.exec_stores 246674 # Number of stores executed
system.cpu.iew.exec_rate 0.799720 # Inst execution rate
system.cpu.iew.wb_sent 3255587 # cumulative count of insts sent to commit
system.cpu.iew.wb_count 3252939 # cumulative count of insts written-back
system.cpu.iew.wb_producers 2239991 # num instructions producing a value
system.cpu.iew.wb_consumers 3437647 # num instructions consuming a value
system.cpu.iew.wb_penalized 0 # number of instrctions required to write to 'other' IQ
system.cpu.iew.wb_rate 0.796923 # insts written-back per cycle
system.cpu.iew.wb_fanout 0.651606 # average fanout of values written-back
system.cpu.iew.wb_penalized_rate 0 # fraction of instructions written-back that wrote to 'other' IQ
system.cpu.commit.commitSquashedInsts 216017 # The number of squashed insts skipped by commit
system.cpu.commit.commitNonSpecStalls 15 # The number of times commit has been forced to stall to communicate backwards
system.cpu.commit.branchMispredicts 14019 # The number of times a branch was mispredicted
system.cpu.commit.committed_per_cycle::samples 3991270 # Number of insts commited each cycle
system.cpu.commit.committed_per_cycle::mean 0.781642 # Number of insts commited each cycle
system.cpu.commit.committed_per_cycle::stdev 1.261675 # Number of insts commited each cycle
system.cpu.commit.committed_per_cycle::underflows 0 0.00% 0.00% # Number of insts commited each cycle
system.cpu.commit.committed_per_cycle::0 2545438 63.78% 63.78% # Number of insts commited each cycle
system.cpu.commit.committed_per_cycle::1 609615 15.27% 79.05% # Number of insts commited each cycle
system.cpu.commit.committed_per_cycle::2 322996 8.09% 87.14% # Number of insts commited each cycle
system.cpu.commit.committed_per_cycle::3 188745 4.73% 91.87% # Number of insts commited each cycle
system.cpu.commit.committed_per_cycle::4 324476 8.13% 100.00% # Number of insts commited each cycle
system.cpu.commit.committed_per_cycle::overflows 0 0.00% 100.00% # Number of insts commited each cycle
system.cpu.commit.committed_per_cycle::min_value 0 # Number of insts commited each cycle
system.cpu.commit.committed_per_cycle::max_value 4 # Number of insts commited each cycle
system.cpu.commit.committed_per_cycle::total 3991270 # Number of insts commited each cycle
system.cpu.commit.committedInsts 1680562 # Number of instructions committed
system.cpu.commit.committedOps 3119746 # Number of ops (including micro ops) committed
system.cpu.commit.swp_count 0 # Number of s/w prefetches committed
system.cpu.commit.refs 692255 # Number of memory references committed
system.cpu.commit.loads 447128 # Number of loads committed
system.cpu.commit.membars 0 # Number of memory barriers committed
system.cpu.commit.branches 336284 # Number of branches committed
system.cpu.commit.fp_insts 92175 # Number of committed floating point instructions.
system.cpu.commit.int_insts 3034698 # Number of committed integer instructions.
system.cpu.commit.function_calls 24008 # Number of function calls committed.
system.cpu.commit.op_class_0::No_OpClass 14063 0.45% 0.45% # Class of committed instruction

system.cpu.commit.op_class_0::IntAlu 2330593 74.70% 75.16% # Class of committed instruction
system.cpu.commit.op_class_0::IntMult 10673 0.34% 75.50% # Class of committed instruction
system.cpu.commit.op_class_0::IntDiv 28 0.00% 75.50% # Class of committed instruction
system.cpu.commit.op_class_0::FloatAdd 72134 2.31% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::FloatCmp 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::FloatCvt 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::FloatMult 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::FloatDiv 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::FloatSqrt 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdAdd 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdAddAcc 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdAlu 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdCmp 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdCvt 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdMisc 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdMult 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdMultAcc 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdShift 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdShiftAcc 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdSqrt 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdFloatAdd 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdFloatAlu 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdFloatCmp 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdFloatCvt 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdFloatDiv 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdFloatMisc 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdFloatMult 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdFloatMultAcc 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::SimdFloatSqrt 0 0.00% 77.81% # Class of committed instruction
system.cpu.commit.op_class_0::MemRead 447128 14.33% 92.14% # Class of committed instruction
system.cpu.commit.op_class_0::MemWrite 245127 7.86% 100.00% # Class of committed instruction
system.cpu.commit.op_class_0::IprAccess 0 0.00% 100.00% # Class of committed instruction
system.cpu.commit.op_class_0::InstPrefetch 0 0.00% 100.00% # Class of committed instruction
system.cpu.commit.op_class_0::total 3119746 # Class of committed instruction
system.cpu.commit.bw_lim_events 324476 # number cycles where commit BW limit reached
system.cpu.rob.rob_reads 7002557 # The number of ROB reads
system.cpu.rob.rob_writes 6734591 # The number of ROB writes
system.cpu.timesIdled 361 # Number of times that the entire CPU went into an idle state and unscheduled itself
system.cpu.idleCycles 27667 # Total number of cycles that the CPU has spent unscheduled due to idling
system.cpu.committedInsts 1680562 # Number of Instructions Simulated
system.cpu.committedOps 3119746 # Number of Ops (including micro ops) Simulated
system.cpu.cpi 2.428876 # CPI: Cycles Per Instruction
system.cpu.cpi_total 2.428876 # CPI: Total CPI of All Threads
system.cpu.ipc 0.411713 # IPC: Instructions Per Cycle
system.cpu.ipc_total 0.411713 # IPC: Total IPC of All Threads
system.cpu.int_regfile_reads 4800419 # number of integer regfile reads

system.cpu.int_regfile_writes 2572964 # number of integer regfile writes
system.cpu.fp_regfile_reads 156387 # number of floating regfile reads
system.cpu.fp_regfile_writes 76194 # number of floating regfile writes
system.cpu.cc_regfile_reads 1993602 # number of cc regfile reads
system.cpu.cc_regfile_writes 1208571 # number of cc regfile writes
system.cpu.misc_regfile_reads 1428960 # number of misc regfile reads
system.cpu.misc_regfile_writes 1 # number of misc regfile writes
system.cpu.dcache.tags.replacements 6753 # number of replacements
system.cpu.dcache.tags.tagsinuse 63.840482 # Cycle average of tags in use
system.cpu.dcache.tags.total_refs 679602 # Total number of references to valid blocks.
system.cpu.dcache.tags.sampled_refs 6817 # Sample count of references to valid blocks.
system.cpu.dcache.tags.avg_refs 99.692240 # Average number of references to valid blocks.
system.cpu.dcache.tags.warmup_cycle 17792750 # Cycle when the warmup percentage was hit.
system.cpu.dcache.tags.occ_blocks::cpu.data 63.840482 # Average occupied blocks per requestor
system.cpu.dcache.tags.occ_percent::cpu.data 0.997508 # Average percentage of cache occupancy
system.cpu.dcache.tags.occ_percent::total 0.997508 # Average percentage of cache occupancy
system.cpu.dcache.tags.occ_task_id_blocks::1024 64 # Occupied blocks per task id
system.cpu.dcache.tags.age_task_id_blocks_1024::0 31 # Occupied blocks per task id
system.cpu.dcache.tags.age_task_id_blocks_1024::1 8 # Occupied blocks per task id
system.cpu.dcache.tags.age_task_id_blocks_1024::2 21 # Occupied blocks per task id
system.cpu.dcache.tags.age_task_id_blocks_1024::3 4 # Occupied blocks per task id
system.cpu.dcache.tags.occ_task_id_percent::1024 1 # Percentage of cache occupancy per task id
system.cpu.dcache.tags.tag_accesses 1384217 # Number of tag accesses
system.cpu.dcache.tags.data_accesses 1384217 # Number of data accesses
system.cpu.dcache.ReadReq_hits::cpu.data 435615 # number of ReadReq hits
system.cpu.dcache.ReadReq_hits::total 435615 # number of ReadReq hits
system.cpu.dcache.WriteReq_hits::cpu.data 243987 # number of WriteReq hits
system.cpu.dcache.WriteReq_hits::total 243987 # number of WriteReq hits
system.cpu.dcache.demand_hits::cpu.data 679602 # number of demand (read+write) hits
system.cpu.dcache.demand_hits::total 679602 # number of demand (read+write) hits
system.cpu.dcache.overall_hits::cpu.data 679602 # number of overall hits
system.cpu.dcache.overall_hits::total 679602 # number of overall hits
system.cpu.dcache.ReadReq_misses::cpu.data 7958 # number of ReadReq misses
system.cpu.dcache.ReadReq_misses::total 7958 # number of ReadReq misses
system.cpu.dcache.WriteReq_misses::cpu.data 1140 # number of WriteReq misses
system.cpu.dcache.WriteReq_misses::total 1140 # number of WriteReq misses
system.cpu.dcache.demand_misses::cpu.data 9098 # number of demand (read+write) misses
system.cpu.dcache.demand_misses::total 9098 # number of demand (read+write) misses
system.cpu.dcache.overall_misses::cpu.data 9098 # number of overall misses
system.cpu.dcache.overall_misses::total 9098 # number of overall misses
system.cpu.dcache.ReadReq_miss_latency::cpu.data 117141750 # number of ReadReq miss cycles
system.cpu.dcache.ReadReq_miss_latency::total 117141750 # number of ReadReq miss cycles
system.cpu.dcache.WriteReq_miss_latency::cpu.data 31874500 # number of WriteReq miss cycles
system.cpu.dcache.WriteReq_miss_latency::total 31874500 # number of WriteReq miss cycles
system.cpu.dcache.demand_miss_latency::cpu.data 149016250 # number of demand (read+write) miss cycles
system.cpu.dcache.demand_miss_latency::total 149016250 # number of demand (read+write) miss cycles

system.cpu.dcache.overall_miss_latency::cpu.data 149016250 # number of overall miss cycles
system.cpu.dcache.overall_miss_latency::total 149016250 # number of overall miss cycles
system.cpu.dcache.ReadReq_accesses::cpu.data 443573 # number of ReadReq accesses(hits+misses)
system.cpu.dcache.ReadReq_accesses::total 443573 # number of ReadReq accesses(hits+misses)
system.cpu.dcache.WriteReq_accesses::cpu.data 245127 # number of WriteReq accesses(hits+misses)
system.cpu.dcache.WriteReq_accesses::total 245127 # number of WriteReq accesses(hits+misses)
system.cpu.dcache.demand_accesses::cpu.data 688700 # number of demand (read+write) accesses
system.cpu.dcache.demand_accesses::total 688700 # number of demand (read+write) accesses
system.cpu.dcache.overall_accesses::cpu.data 688700 # number of overall (read+write) accesses
system.cpu.dcache.overall_accesses::total 688700 # number of overall (read+write) accesses
system.cpu.dcache.ReadReq_miss_rate::cpu.data 0.017941 # miss rate for ReadReq accesses
system.cpu.dcache.ReadReq_miss_rate::total 0.017941 # miss rate for ReadReq accesses
system.cpu.dcache.WriteReq_miss_rate::cpu.data 0.004651 # miss rate for WriteReq accesses
system.cpu.dcache.WriteReq_miss_rate::total 0.004651 # miss rate for WriteReq accesses
system.cpu.dcache.demand_miss_rate::cpu.data 0.013210 # miss rate for demand accesses
system.cpu.dcache.demand_miss_rate::total 0.013210 # miss rate for demand accesses
system.cpu.dcache.overall_miss_rate::cpu.data 0.013210 # miss rate for overall accesses
system.cpu.dcache.overall_miss_rate::total 0.013210 # miss rate for overall accesses
system.cpu.dcache.ReadReq_avg_miss_latency::cpu.data 14719.998743 # average ReadReq miss latency
system.cpu.dcache.ReadReq_avg_miss_latency::total 14719.998743 # average ReadReq miss latency
system.cpu.dcache.WriteReq_avg_miss_latency::cpu.data 27960.087719 # average WriteReq miss latency
system.cpu.dcache.WriteReq_avg_miss_latency::total 27960.087719 # average WriteReq miss latency
system.cpu.dcache.demand_avg_miss_latency::cpu.data 16379.011871 # average overall miss latency
system.cpu.dcache.demand_avg_miss_latency::total 16379.011871 # average overall miss latency
system.cpu.dcache.overall_avg_miss_latency::cpu.data 16379.011871 # average overall miss latency
system.cpu.dcache.overall_avg_miss_latency::total 16379.011871 # average overall miss latency
system.cpu.dcache.blocked_cycles::no_mshrs 229 # number of cycles access was blocked
system.cpu.dcache.blocked_cycles::no_targets 0 # number of cycles access was blocked
system.cpu.dcache.blocked::no_mshrs 6 # number of cycles access was blocked
system.cpu.dcache.blocked::no_targets 0 # number of cycles access was blocked
system.cpu.dcache.avg_blocked_cycles::no_mshrs 38.166667 # average number of cycles each access was blocked
system.cpu.dcache.avg_blocked_cycles::no_targets nan # average number of cycles each access was blocked
system.cpu.dcache.fast_writes 0 # number of fast writes performed
system.cpu.dcache.cache_copies 0 # number of cache copies performed
system.cpu.dcache.writebacks::writebacks 4034 # number of writebacks
system.cpu.dcache.writebacks::total 4034 # number of writebacks
system.cpu.dcache.ReadReq_mshr_hits::cpu.data 2273 # number of ReadReq MSHR hits
system.cpu.dcache.ReadReq_mshr_hits::total 2273 # number of ReadReq MSHR hits

system.cpu.dcache.WriteReq_mshr_hits::cpu.data 8 # number of WriteReq MSHR hits
system.cpu.dcache.WriteReq_mshr_hits::total 8 # number of WriteReq MSHR hits
system.cpu.dcache.demand_mshr_hits::cpu.data 2281 # number of demand (read+write) MSHR hits
system.cpu.dcache.demand_mshr_hits::total 2281 # number of demand (read+write) MSHR hits
system.cpu.dcache.overall_mshr_hits::cpu.data 2281 # number of overall MSHR hits
system.cpu.dcache.overall_mshr_hits::total 2281 # number of overall MSHR hits
system.cpu.dcache.ReadReq_mshr_misses::cpu.data 5685 # number of ReadReq MSHR misses
system.cpu.dcache.ReadReq_mshr_misses::total 5685 # number of ReadReq MSHR misses
system.cpu.dcache.WriteReq_mshr_misses::cpu.data 1132 # number of WriteReq MSHR misses
system.cpu.dcache.WriteReq_mshr_misses::total 1132 # number of WriteReq MSHR misses
system.cpu.dcache.demand_mshr_misses::cpu.data 6817 # number of demand (read+write) MSHR misses
system.cpu.dcache.demand_mshr_misses::total 6817 # number of demand (read+write) MSHR misses
system.cpu.dcache.overall_mshr_misses::cpu.data 6817 # number of overall MSHR misses
system.cpu.dcache.overall_mshr_misses::total 6817 # number of overall MSHR misses
system.cpu.dcache.ReadReq_mshr_miss_latency::cpu.data 82707750 # number of ReadReq MSHR miss cycles
system.cpu.dcache.ReadReq_mshr_miss_latency::total 82707750 # number of ReadReq MSHR miss cycles
system.cpu.dcache.WriteReq_mshr_miss_latency::cpu.data 29993500 # number of WriteReq MSHR miss cycles
system.cpu.dcache.WriteReq_mshr_miss_latency::total 29993500 # number of WriteReq MSHR miss cycles
system.cpu.dcache.demand_mshr_miss_latency::cpu.data 112701250 # number of demand (read+write) MSHR miss cycles
system.cpu.dcache.demand_mshr_miss_latency::total 112701250 # number of demand (read+write) MSHR miss cycles
system.cpu.dcache.overall_mshr_miss_latency::cpu.data 112701250 # number of overall MSHR miss cycles
system.cpu.dcache.overall_mshr_miss_latency::total 112701250 # number of overall MSHR miss cycles
system.cpu.dcache.ReadReq_mshr_miss_rate::cpu.data 0.012816 # mshr miss rate for ReadReq accesses
system.cpu.dcache.ReadReq_mshr_miss_rate::total 0.012816 # mshr miss rate for ReadReq accesses
system.cpu.dcache.WriteReq_mshr_miss_rate::cpu.data 0.004618 # mshr miss rate for WriteReq accesses
system.cpu.dcache.WriteReq_mshr_miss_rate::total 0.004618 # mshr miss rate for WriteReq accesses
system.cpu.dcache.demand_mshr_miss_rate::cpu.data 0.009898 # mshr miss rate for demand accesses
system.cpu.dcache.demand_mshr_miss_rate::total 0.009898 # mshr miss rate for demand accesses
system.cpu.dcache.overall_mshr_miss_rate::cpu.data 0.009898 # mshr miss rate for overall accesses
system.cpu.dcache.overall_mshr_miss_rate::total 0.009898 # mshr miss rate for overall accesses
system.cpu.dcache.ReadReq_avg_mshr_miss_latency::cpu.data 14548.416887 # average ReadReq mshr miss latency

system.cpu.dcache.ReadReq_avg_mshr_miss_latency::total 14548.416887 # average ReadReq mshr miss latency
system.cpu.dcache.WriteReq_avg_mshr_miss_latency::cpu.data 26496.024735 # average WriteReq mshr miss latency
system.cpu.dcache.WriteReq_avg_mshr_miss_latency::total 26496.024735 # average WriteReq mshr miss latency
system.cpu.dcache.demand_avg_mshr_miss_latency::cpu.data 16532.382280 # average overall mshr miss latency
system.cpu.dcache.demand_avg_mshr_miss_latency::total 16532.382280 # average overall mshr miss latency
system.cpu.dcache.overall_avg_mshr_miss_latency::cpu.data 16532.382280 # average overall mshr miss latency
system.cpu.dcache.overall_avg_mshr_miss_latency::total 16532.382280 # average overall mshr miss latency
system.cpu.dcache.no_allocate_misses 0 # Number of misses that were no-allocate
system.cpu.icache.tags.replacements 70634 # number of replacements
system.cpu.icache.tags.tagsinuse 63.884940 # Cycle average of tags in use
system.cpu.icache.tags.total_refs 567915 # Total number of references to valid blocks.
system.cpu.icache.tags.sampled_refs 70698 # Sample count of references to valid blocks.
system.cpu.icache.tags.avg_refs 8.032971 # Average number of references to valid blocks.
system.cpu.icache.tags.warmup_cycle 12785750 # Cycle when the warmup percentage was hit.
system.cpu.icache.tags.occ_blocks::cpu.inst 63.884940 # Average occupied blocks per requestor
system.cpu.icache.tags.occ_percent::cpu.inst 0.998202 # Average percentage of cache occupancy
system.cpu.icache.tags.occ_percent::total 0.998202 # Average percentage of cache occupancy
system.cpu.icache.tags.occ_task_id_blocks::1024 64 # Occupied blocks per task id
system.cpu.icache.tags.age_task_id_blocks_1024::0 59 # Occupied blocks per task id
system.cpu.icache.tags.age_task_id_blocks_1024::2 3 # Occupied blocks per task id
system.cpu.icache.tags.age_task_id_blocks_1024::3 2 # Occupied blocks per task id
system.cpu.icache.tags.occ_task_id_percent::1024 1 # Percentage of cache occupancy per task id
system.cpu.icache.tags.tag_accesses 1350270 # Number of tag accesses
system.cpu.icache.tags.data_accesses 1350270 # Number of data accesses
system.cpu.icache.ReadReq_hits::cpu.inst 567915 # number of ReadReq hits
system.cpu.icache.ReadReq_hits::total 567915 # number of ReadReq hits
system.cpu.icache.demand_hits::cpu.inst 567915 # number of demand (read+write) hits
system.cpu.icache.demand_hits::total 567915 # number of demand (read+write) hits
system.cpu.icache.overall_hits::cpu.inst 567915 # number of overall hits
system.cpu.icache.overall_hits::total 567915 # number of overall hits
system.cpu.icache.ReadReq_misses::cpu.inst 71871 # number of ReadReq misses
system.cpu.icache.ReadReq_misses::total 71871 # number of ReadReq misses
system.cpu.icache.demand_misses::cpu.inst 71871 # number of demand (read+write) misses
system.cpu.icache.demand_misses::total 71871 # number of demand (read+write) misses
system.cpu.icache.overall_misses::cpu.inst 71871 # number of overall misses
system.cpu.icache.overall_misses::total 71871 # number of overall misses
system.cpu.icache.ReadReq_miss_latency::cpu.inst 1024157499 # number of ReadReq miss cycles
system.cpu.icache.ReadReq_miss_latency::total 1024157499 # number of ReadReq miss cycles
system.cpu.icache.demand_miss_latency::cpu.inst 1024157499 # number of demand (read+write) miss cycles
system.cpu.icache.demand_miss_latency::total 1024157499 # number of demand (read+write) miss

cycles
system.cpu.icache.overall_miss_latency::cpu.inst 1024157499 # number of overall miss cycles
system.cpu.icache.overall_miss_latency::total 1024157499 # number of overall miss cycles
system.cpu.icache.ReadReq_accesses::cpu.inst 639786 # number of ReadReq accesses(hits+misses)
system.cpu.icache.ReadReq_accesses::total 639786 # number of ReadReq accesses(hits+misses)
system.cpu.icache.demand_accesses::cpu.inst 639786 # number of demand (read+write) accesses
system.cpu.icache.demand_accesses::total 639786 # number of demand (read+write) accesses
system.cpu.icache.overall_accesses::cpu.inst 639786 # number of overall (read+write) accesses
system.cpu.icache.overall_accesses::total 639786 # number of overall (read+write) accesses
system.cpu.icache.ReadReq_miss_rate::cpu.inst 0.112336 # miss rate for ReadReq accesses
system.cpu.icache.ReadReq_miss_rate::total 0.112336 # miss rate for ReadReq accesses
system.cpu.icache.demand_miss_rate::cpu.inst 0.112336 # miss rate for demand accesses
system.cpu.icache.demand_miss_rate::total 0.112336 # miss rate for demand accesses
system.cpu.icache.overall_miss_rate::cpu.inst 0.112336 # miss rate for overall accesses
system.cpu.icache.overall_miss_rate::total 0.112336 # miss rate for overall accesses
system.cpu.icache.ReadReq_avg_miss_latency::cpu.inst 14249.940852 # average ReadReq miss latency
system.cpu.icache.ReadReq_avg_miss_latency::total 14249.940852 # average ReadReq miss latency
system.cpu.icache.demand_avg_miss_latency::cpu.inst 14249.940852 # average overall miss latency
system.cpu.icache.demand_avg_miss_latency::total 14249.940852 # average overall miss latency
system.cpu.icache.overall_avg_miss_latency::cpu.inst 14249.940852 # average overall miss latency
system.cpu.icache.overall_avg_miss_latency::total 14249.940852 # average overall miss latency
system.cpu.icache.blocked_cycles::no_mshrs 32 # number of cycles access was blocked
system.cpu.icache.blocked_cycles::no_targets 0 # number of cycles access was blocked
system.cpu.icache.blocked::no_mshrs 1 # number of cycles access was blocked
system.cpu.icache.blocked::no_targets 0 # number of cycles access was blocked
system.cpu.icache.avg_blocked_cycles::no_mshrs 32 # average number of cycles each access was blocked
system.cpu.icache.avg_blocked_cycles::no_targets nan # average number of cycles each access was blocked
system.cpu.icache.fast_writes 0 # number of fast writes performed
system.cpu.icache.cache_copies 0 # number of cache copies performed
system.cpu.icache.ReadReq_mshr_hits::cpu.inst 1172 # number of ReadReq MSHR hits
system.cpu.icache.ReadReq_mshr_hits::total 1172 # number of ReadReq MSHR hits
system.cpu.icache.demand_mshr_hits::cpu.inst 1172 # number of demand (read+write) MSHR hits
system.cpu.icache.demand_mshr_hits::total 1172 # number of demand (read+write) MSHR hits
system.cpu.icache.overall_mshr_hits::cpu.inst 1172 # number of overall MSHR hits
system.cpu.icache.overall_mshr_hits::total 1172 # number of overall MSHR hits
system.cpu.icache.ReadReq_mshr_misses::cpu.inst 70699 # number of ReadReq MSHR misses
system.cpu.icache.ReadReq_mshr_misses::total 70699 # number of ReadReq MSHR misses
system.cpu.icache.demand_mshr_misses::cpu.inst 70699 # number of demand (read+write) MSHR misses
system.cpu.icache.demand_mshr_misses::total 70699 # number of demand (read+write) MSHR misses
system.cpu.icache.overall_mshr_misses::cpu.inst 70699 # number of overall MSHR misses
system.cpu.icache.overall_mshr_misses::total 70699 # number of overall MSHR misses
system.cpu.icache.ReadReq_mshr_miss_latency::cpu.inst 907837251 # number of ReadReq MSHR

miss cycles
system.cpu.icache.ReadReq_mshr_miss_latency::total 907837251 # number of ReadReq MSHR miss cycles
system.cpu.icache.demand_mshr_miss_latency::cpu.inst 907837251 # number of demand (read+write) MSHR miss cycles
system.cpu.icache.demand_mshr_miss_latency::total 907837251 # number of demand (read+write) MSHR miss cycles
system.cpu.icache.overall_mshr_miss_latency::cpu.inst 907837251 # number of overall MSHR miss cycles
system.cpu.icache.overall_mshr_miss_latency::total 907837251 # number of overall MSHR miss cycles
system.cpu.icache.ReadReq_mshr_miss_rate::cpu.inst 0.110504 # mshr miss rate for ReadReq accesses
system.cpu.icache.ReadReq_mshr_miss_rate::total 0.110504 # mshr miss rate for ReadReq accesses
system.cpu.icache.demand_mshr_miss_rate::cpu.inst 0.110504 # mshr miss rate for demand accesses
system.cpu.icache.demand_mshr_miss_rate::total 0.110504 # mshr miss rate for demand accesses
system.cpu.icache.overall_mshr_miss_rate::cpu.inst 0.110504 # mshr miss rate for overall accesses
system.cpu.icache.overall_mshr_miss_rate::total 0.110504 # mshr miss rate for overall accesses
system.cpu.icache.ReadReq_avg_mshr_miss_latency::cpu.inst 12840.878244 # average ReadReq mshr miss latency
system.cpu.icache.ReadReq_avg_mshr_miss_latency::total 12840.878244 # average ReadReq mshr miss latency
system.cpu.icache.demand_avg_mshr_miss_latency::cpu.inst 12840.878244 # average overall mshr miss latency
system.cpu.icache.demand_avg_mshr_miss_latency::total 12840.878244 # average overall mshr miss latency
system.cpu.icache.overall_avg_mshr_miss_latency::cpu.inst 12840.878244 # average overall mshr miss latency
system.cpu.icache.overall_avg_mshr_miss_latency::total 12840.878244 # average overall mshr miss latency
system.cpu.icache.no_allocate_misses 0 # Number of misses that were no-allocate
system.cpu.l2cache.tags.replacements 37 # number of replacements
system.cpu.l2cache.tags.tagsinuse 618.387801 # Cycle average of tags in use
system.cpu.l2cache.tags.total_refs 79511 # Total number of references to valid blocks.
system.cpu.l2cache.tags.sampled_refs 766 # Sample count of references to valid blocks.
system.cpu.l2cache.tags.avg_refs 103.800261 # Average number of references to valid blocks.
system.cpu.l2cache.tags.warmup_cycle 0 # Cycle when the warmup percentage was hit.
system.cpu.l2cache.tags.occ_blocks::writebacks 198.803799 # Average occupied blocks per requestor
system.cpu.l2cache.tags.occ_blocks::cpu.inst 349.254536 # Average occupied blocks per requestor
system.cpu.l2cache.tags.occ_blocks::cpu.data 70.329466 # Average occupied blocks per requestor
system.cpu.l2cache.tags.occ_percent::writebacks 0.194144 # Average percentage of cache occupancy
system.cpu.l2cache.tags.occ_percent::cpu.inst 0.341069 # Average percentage of cache occupancy
system.cpu.l2cache.tags.occ_percent::cpu.data 0.068681 # Average percentage of cache occupancy
system.cpu.l2cache.tags.occ_percent::total 0.603894 # Average percentage of cache occupancy
system.cpu.l2cache.tags.occ_task_id_blocks::1024 729 # Occupied blocks per task id

system.cpu.l2cache.tags.age_task_id_blocks_1024::0 93 # Occupied blocks per task id
system.cpu.l2cache.tags.age_task_id_blocks_1024::1 15 # Occupied blocks per task id
system.cpu.l2cache.tags.age_task_id_blocks_1024::2 72 # Occupied blocks per task id
system.cpu.l2cache.tags.age_task_id_blocks_1024::3 549 # Occupied blocks per task id
system.cpu.l2cache.tags.occ_task_id_percent::1024 0.711914 # Percentage of cache occupancy per task id
system.cpu.l2cache.tags.tag_accesses 328101 # Number of tag accesses
system.cpu.l2cache.tags.data_accesses 328101 # Number of data accesses
system.cpu.l2cache.ReadReq_hits::cpu.inst 70260 # number of ReadReq hits
system.cpu.l2cache.ReadReq_hits::cpu.data 5591 # number of ReadReq hits
system.cpu.l2cache.ReadReq_hits::total 75851 # number of ReadReq hits
system.cpu.l2cache.Writeback_hits::writebacks 4034 # number of Writeback hits
system.cpu.l2cache.Writeback_hits::total 4034 # number of Writeback hits
system.cpu.l2cache.ReadExReq_hits::cpu.data 883 # number of ReadExReq hits
system.cpu.l2cache.ReadExReq_hits::total 883 # number of ReadExReq hits
system.cpu.l2cache.demand_hits::cpu.inst 70260 # number of demand (read+write) hits
system.cpu.l2cache.demand_hits::cpu.data 6474 # number of demand (read+write) hits
system.cpu.l2cache.demand_hits::total 76734 # number of demand (read+write) hits
system.cpu.l2cache.overall_hits::cpu.inst 70260 # number of overall hits
system.cpu.l2cache.overall_hits::cpu.data 6474 # number of overall hits
system.cpu.l2cache.overall_hits::total 76734 # number of overall hits
system.cpu.l2cache.ReadReq_misses::cpu.inst 439 # number of ReadReq misses
system.cpu.l2cache.ReadReq_misses::cpu.data 91 # number of ReadReq misses
system.cpu.l2cache.ReadReq_misses::total 530 # number of ReadReq misses
system.cpu.l2cache.ReadExReq_misses::cpu.data 252 # number of ReadExReq misses
system.cpu.l2cache.ReadExReq_misses::total 252 # number of ReadExReq misses
system.cpu.l2cache.demand_misses::cpu.inst 439 # number of demand (read+write) misses
system.cpu.l2cache.demand_misses::cpu.data 343 # number of demand (read+write) misses
system.cpu.l2cache.demand_misses::total 782 # number of demand (read+write) misses
system.cpu.l2cache.overall_misses::cpu.inst 439 # number of overall misses
system.cpu.l2cache.overall_misses::cpu.data 343 # number of overall misses
system.cpu.l2cache.overall_misses::total 782 # number of overall misses
system.cpu.l2cache.ReadReq_miss_latency::cpu.inst 29124500 # number of ReadReq miss cycles
system.cpu.l2cache.ReadReq_miss_latency::cpu.data 6989750 # number of ReadReq miss cycles
system.cpu.l2cache.ReadReq_miss_latency::total 36114250 # number of ReadReq miss cycles
system.cpu.l2cache.ReadExReq_miss_latency::cpu.data 17594000 # number of ReadExReq miss cycles
system.cpu.l2cache.ReadExReq_miss_latency::total 17594000 # number of ReadExReq miss cycles
system.cpu.l2cache.demand_miss_latency::cpu.inst 29124500 # number of demand (read+write) miss cycles
system.cpu.l2cache.demand_miss_latency::cpu.data 24583750 # number of demand (read+write) miss cycles
system.cpu.l2cache.demand_miss_latency::total 53708250 # number of demand (read+write) miss cycles
system.cpu.l2cache.overall_miss_latency::cpu.inst 29124500 # number of overall miss cycles
system.cpu.l2cache.overall_miss_latency::cpu.data 24583750 # number of overall miss cycles
system.cpu.l2cache.overall_miss_latency::total 53708250 # number of overall miss cycles
system.cpu.l2cache.ReadReq_accesses::cpu.inst 70699 # number of ReadReq accesses(hits+misses)

system.cpu.l2cache.ReadReq_accesses::cpu.data 5682 # number of ReadReq accesses(hits+misses)
system.cpu.l2cache.ReadReq_accesses::total 76381 # number of ReadReq accesses(hits+misses)
system.cpu.l2cache.Writeback_accesses::writebacks 4034 # number of Writeback accesses(hits+misses)
system.cpu.l2cache.Writeback_accesses::total 4034 # number of Writeback accesses(hits+misses)
system.cpu.l2cache.ReadExReq_accesses::cpu.data 1135 # number of ReadExReq accesses(hits+misses)
system.cpu.l2cache.ReadExReq_accesses::total 1135 # number of ReadExReq accesses(hits+misses)
system.cpu.l2cache.demand_accesses::cpu.inst 70699 # number of demand (read+write) accesses
system.cpu.l2cache.demand_accesses::cpu.data 6817 # number of demand (read+write) accesses
system.cpu.l2cache.demand_accesses::total 77516 # number of demand (read+write) accesses
system.cpu.l2cache.overall_accesses::cpu.inst 70699 # number of overall (read+write) accesses
system.cpu.l2cache.overall_accesses::cpu.data 6817 # number of overall (read+write) accesses
system.cpu.l2cache.overall_accesses::total 77516 # number of overall (read+write) accesses
system.cpu.l2cache.ReadReq_miss_rate::cpu.inst 0.006209 # miss rate for ReadReq accesses
system.cpu.l2cache.ReadReq_miss_rate::cpu.data 0.016015 # miss rate for ReadReq accesses
system.cpu.l2cache.ReadReq_miss_rate::total 0.006939 # miss rate for ReadReq accesses
system.cpu.l2cache.ReadExReq_miss_rate::cpu.data 0.222026 # miss rate for ReadExReq accesses
system.cpu.l2cache.ReadExReq_miss_rate::total 0.222026 # miss rate for ReadExReq accesses
system.cpu.l2cache.demand_miss_rate::cpu.inst 0.006209 # miss rate for demand accesses
system.cpu.l2cache.demand_miss_rate::cpu.data 0.050315 # miss rate for demand accesses
system.cpu.l2cache.demand_miss_rate::total 0.010088 # miss rate for demand accesses
system.cpu.l2cache.overall_miss_rate::cpu.inst 0.006209 # miss rate for overall accesses
system.cpu.l2cache.overall_miss_rate::cpu.data 0.050315 # miss rate for overall accesses
system.cpu.l2cache.overall_miss_rate::total 0.010088 # miss rate for overall accesses
system.cpu.l2cache.ReadReq_avg_miss_latency::cpu.inst 66342.824601 # average ReadReq miss latency
system.cpu.l2cache.ReadReq_avg_miss_latency::cpu.data 76810.439560 # average ReadReq miss latency
system.cpu.l2cache.ReadReq_avg_miss_latency::total 68140.094340 # average ReadReq miss latency
system.cpu.l2cache.ReadExReq_avg_miss_latency::cpu.data 69817.460317 # average ReadExReq miss latency
system.cpu.l2cache.ReadExReq_avg_miss_latency::total 69817.460317 # average ReadExReq miss latency
system.cpu.l2cache.demand_avg_miss_latency::cpu.inst 66342.824601 # average overall miss latency
system.cpu.l2cache.demand_avg_miss_latency::cpu.data 71672.740525 # average overall miss latency
system.cpu.l2cache.demand_avg_miss_latency::total 68680.626598 # average overall miss latency
system.cpu.l2cache.overall_avg_miss_latency::cpu.inst 66342.824601 # average overall miss latency
system.cpu.l2cache.overall_avg_miss_latency::cpu.data 71672.740525 # average overall miss latency
system.cpu.l2cache.overall_avg_miss_latency::total 68680.626598 # average overall miss latency
system.cpu.l2cache.blocked_cycles::no_mshrs 0 # number of cycles access was blocked
system.cpu.l2cache.blocked_cycles::no_targets 0 # number of cycles access was blocked
system.cpu.l2cache.blocked::no_mshrs 0 # number of cycles access was blocked
system.cpu.l2cache.blocked::no_targets 0 # number of cycles access was blocked

system.cpu.l2cache.avg_blocked_cycles::no_mshrs nan # average number of cycles each access was blocked
system.cpu.l2cache.avg_blocked_cycles::no_targets nan # average number of cycles each access was blocked
system.cpu.l2cache.fast_writes 0 # number of fast writes performed
system.cpu.l2cache.cache_copies 0 # number of cache copies performed
system.cpu.l2cache.writebacks::writebacks 7 # number of writebacks
system.cpu.l2cache.writebacks::total 7 # number of writebacks
system.cpu.l2cache.ReadReq_mshr_misses::cpu.inst 439 # number of ReadReq MSHR misses
system.cpu.l2cache.ReadReq_mshr_misses::cpu.data 91 # number of ReadReq MSHR misses
system.cpu.l2cache.ReadReq_mshr_misses::total 530 # number of ReadReq MSHR misses
system.cpu.l2cache.ReadExReq_mshr_misses::cpu.data 252 # number of ReadExReq MSHR misses
system.cpu.l2cache.ReadExReq_mshr_misses::total 252 # number of ReadExReq MSHR misses
system.cpu.l2cache.demand_mshr_misses::cpu.inst 439 # number of demand (read+write) MSHR misses
system.cpu.l2cache.demand_mshr_misses::cpu.data 343 # number of demand (read+write) MSHR misses
system.cpu.l2cache.demand_mshr_misses::total 782 # number of demand (read+write) MSHR misses
system.cpu.l2cache.overall_mshr_misses::cpu.inst 439 # number of overall MSHR misses
system.cpu.l2cache.overall_mshr_misses::cpu.data 343 # number of overall MSHR misses
system.cpu.l2cache.overall_mshr_misses::total 782 # number of overall MSHR misses
system.cpu.l2cache.ReadReq_mshr_miss_latency::cpu.inst 26743500 # number of ReadReq MSHR miss cycles
system.cpu.l2cache.ReadReq_mshr_miss_latency::cpu.data 6502250 # number of ReadReq MSHR miss cycles
system.cpu.l2cache.ReadReq_mshr_miss_latency::total 33245750 # number of ReadReq MSHR miss cycles
system.cpu.l2cache.ReadExReq_mshr_miss_latency::cpu.data 16265000 # number of ReadExReq MSHR miss cycles
system.cpu.l2cache.ReadExReq_mshr_miss_latency::total 16265000 # number of ReadExReq MSHR miss cycles
system.cpu.l2cache.demand_mshr_miss_latency::cpu.inst 26743500 # number of demand (read+write) MSHR miss cycles
system.cpu.l2cache.demand_mshr_miss_latency::cpu.data 22767250 # number of demand (read+write) MSHR miss cycles
system.cpu.l2cache.demand_mshr_miss_latency::total 49510750 # number of demand (read+write) MSHR miss cycles
system.cpu.l2cache.overall_mshr_miss_latency::cpu.inst 26743500 # number of overall MSHR miss cycles
system.cpu.l2cache.overall_mshr_miss_latency::cpu.data 22767250 # number of overall MSHR miss cycles
system.cpu.l2cache.overall_mshr_miss_latency::total 49510750 # number of overall MSHR miss cycles
system.cpu.l2cache.ReadReq_mshr_miss_rate::cpu.inst 0.006209 # mshr miss rate for ReadReq accesses
system.cpu.l2cache.ReadReq_mshr_miss_rate::cpu.data 0.016015 # mshr miss rate for ReadReq accesses

system.cpu.l2cache.ReadReq_mshr_miss_rate::total 0.006939 # mshr miss rate for ReadReq accesses
system.cpu.l2cache.ReadExReq_mshr_miss_rate::cpu.data 0.222026 # mshr miss rate for ReadExReq accesses
system.cpu.l2cache.ReadExReq_mshr_miss_rate::total 0.222026 # mshr miss rate for ReadExReq accesses
system.cpu.l2cache.demand_mshr_miss_rate::cpu.inst 0.006209 # mshr miss rate for demand accesses
system.cpu.l2cache.demand_mshr_miss_rate::cpu.data 0.050315 # mshr miss rate for demand accesses
system.cpu.l2cache.demand_mshr_miss_rate::total 0.010088 # mshr miss rate for demand accesses
system.cpu.l2cache.overall_mshr_miss_rate::cpu.inst 0.006209 # mshr miss rate for overall accesses
system.cpu.l2cache.overall_mshr_miss_rate::cpu.data 0.050315 # mshr miss rate for overall accesses
system.cpu.l2cache.overall_mshr_miss_rate::total 0.010088 # mshr miss rate for overall accesses
system.cpu.l2cache.ReadReq_avg_mshr_miss_latency::cpu.inst 60919.134396 # average ReadReq mshr miss latency
system.cpu.l2cache.ReadReq_avg_mshr_miss_latency::cpu.data 71453.296703 # average ReadReq mshr miss latency
system.cpu.l2cache.ReadReq_avg_mshr_miss_latency::total 62727.830189 # average ReadReq mshr miss latency
system.cpu.l2cache.ReadExReq_avg_mshr_miss_latency::cpu.data 64543.650794 # average ReadExReq mshr miss latency
system.cpu.l2cache.ReadExReq_avg_mshr_miss_latency::total 64543.650794 # average ReadExReq mshr miss latency
system.cpu.l2cache.demand_avg_mshr_miss_latency::cpu.inst 60919.134396 # average overall mshr miss latency
system.cpu.l2cache.demand_avg_mshr_miss_latency::cpu.data 66376.822157 # average overall mshr miss latency
system.cpu.l2cache.demand_avg_mshr_miss_latency::total 63312.979540 # average overall mshr miss latency
system.cpu.l2cache.overall_avg_mshr_miss_latency::cpu.inst 60919.134396 # average overall mshr miss latency
system.cpu.l2cache.overall_avg_mshr_miss_latency::cpu.data 66376.822157 # average overall mshr miss latency
system.cpu.l2cache.overall_avg_mshr_miss_latency::total 63312.979540 # average overall mshr miss latency
system.cpu.l2cache.no_allocate_misses 0 # Number of misses that were no-allocate
system.l2bus.trans_dist::ReadReq 76381 # Transaction distribution
system.l2bus.trans_dist::ReadResp 76380 # Transaction distribution
system.l2bus.trans_dist::Writeback 4034 # Transaction distribution
system.l2bus.trans_dist::ReadExReq 1135 # Transaction distribution
system.l2bus.trans_dist::ReadExResp 1135 # Transaction distribution
system.l2bus.pkt_count_system.cpu.icache.mem_side::system.cpu.l2cache.cpu_side 141397 # Packet count per connected master and slave (bytes)
system.l2bus.pkt_count_system.cpu.dcache.mem_side::system.cpu.l2cache.cpu_side 17668 # Packet count per connected master and slave (bytes)
system.l2bus.pkt_count::total 159065 # Packet count per connected master and slave (bytes)

system.l2bus.pkt_size_system.cpu.icache.mem_side::system.cpu.l2cache.cpu_side 4524672 # Cumulative packet size per connected master and slave (bytes)
system.l2bus.pkt_size_system.cpu.dcache.mem_side::system.cpu.l2cache.cpu_side 694464 # Cumulative packet size per connected master and slave (bytes)
system.l2bus.pkt_size::total 5219136 # Cumulative packet size per connected master and slave (bytes)
system.l2bus.snoops 0 # Total snoops (count)
system.l2bus.snoop_fanout::samples 81550 # Request fanout histogram
system.l2bus.snoop_fanout::mean 1 # Request fanout histogram
system.l2bus.snoop_fanout::stdev 0 # Request fanout histogram
system.l2bus.snoop_fanout::underflows 0 0.00% 0.00% # Request fanout histogram
system.l2bus.snoop_fanout::0 0 0.00% 0.00% # Request fanout histogram
system.l2bus.snoop_fanout::1 81550 100.00% 100.00% # Request fanout histogram
system.l2bus.snoop_fanout::2 0 0.00% 100.00% # Request fanout histogram
system.l2bus.snoop_fanout::overflows 0 0.00% 100.00% # Request fanout histogram
system.l2bus.snoop_fanout::min_value 1 # Request fanout histogram
system.l2bus.snoop_fanout::max_value 1 # Request fanout histogram
system.l2bus.snoop_fanout::total 81550 # Request fanout histogram
system.l2bus.reqLayer0.occupancy 48843000 # Layer occupancy (ticks)
system.l2bus.reqLayer0.utilization 2.4 # Layer utilization (%)
system.l2bus.respLayer0.occupancy 176840749 # Layer occupancy (ticks)
system.l2bus.respLayer0.utilization 8.7 # Layer utilization (%)
system.l2bus.respLayer1.occupancy 17093250 # Layer occupancy (ticks)
system.l2bus.respLayer1.utilization 0.8 # Layer utilization (%)
system.membus.trans_dist::ReadReq 529 # Transaction distribution
system.membus.trans_dist::ReadResp 529 # Transaction distribution
system.membus.trans_dist::Writeback 7 # Transaction distribution
system.membus.trans_dist::ReadExReq 252 # Transaction distribution
system.membus.trans_dist::ReadExResp 252 # Transaction distribution
system.membus.pkt_count_system.cpu.l2cache.mem_side::system.mem_ctrl.port 1569 # Packet count per connected master and slave (bytes)
system.membus.pkt_count_system.cpu.l2cache.mem_side::total 1569 # Packet count per connected master and slave (bytes)
system.membus.pkt_count::total 1569 # Packet count per connected master and slave (bytes)
system.membus.pkt_size_system.cpu.l2cache.mem_side::system.mem_ctrl.port 50432 # Cumulative packet size per connected master and slave (bytes)
system.membus.pkt_size_system.cpu.l2cache.mem_side::total 50432 # Cumulative packet size per connected master and slave (bytes)
system.membus.pkt_size::total 50432 # Cumulative packet size per connected master and slave (bytes)
system.membus.snoops 0 # Total snoops (count)
system.membus.snoop_fanout::samples 788 # Request fanout histogram
system.membus.snoop_fanout::mean 0 # Request fanout histogram
system.membus.snoop_fanout::stdev 0 # Request fanout histogram
system.membus.snoop_fanout::underflows 0 0.00% 0.00% # Request fanout histogram
system.membus.snoop_fanout::0 788 100.00% 100.00% # Request fanout histogram
system.membus.snoop_fanout::1 0 0.00% 100.00% # Request fanout histogram
system.membus.snoop_fanout::overflows 0 0.00% 100.00% # Request fanout histogram

system.membus.snoop_fanout::min_value 0 # Request fanout histogram
system.membus.snoop_fanout::max_value 0 # Request fanout histogram
system.membus.snoop_fanout::total 788 # Request fanout histogram
system.membus.reqLayer2.occupancy 408000 # Layer occupancy (ticks)
system.membus.reqLayer2.utilization 0.0 # Layer utilization (%)
system.membus.respLayer0.occupancy 2098750 # Layer occupancy (ticks)
system.membus.respLayer0.utilization 0.1 # Layer utilization (%)