---------- Begin Simulation Statistics ----------

sim\_seconds 0.222417 # Number of seconds simulated

sim\_ticks 222416559500 # Number of ticks simulated

final\_tick 222416559500 # Number of ticks from beginning of simulation (restored from checkpoints and never reset)

sim\_freq 1000000000000 # Frequency of simulated ticks

host\_inst\_rate 1599542 # Simulator instruction rate (inst/s)

host\_op\_rate 1599542 # Simulator op (including micro ops) rate (op/s)

host\_tick\_rate 799770906 # Simulator tick rate (ticks/s)

host\_mem\_usage 641804 # Number of bytes of host memory used

host\_seconds 278.10 # Real time elapsed on the host

sim\_insts 444833057 # Number of instructions simulated

sim\_ops 444833057 # Number of ops (including micro ops) simulated

system.voltage\_domain.voltage 1 # Voltage in Volts

system.clk\_domain.clock 1000 # Clock period in ticks

system.mem\_ctrls.pwrStateResidencyTicks::UNDEFINED 222416559500 # Cumulative time (in ticks) in various power states

system.mem\_ctrls.bytes\_read::.cpu.inst 1779332332 # Number of bytes read from this memory

system.mem\_ctrls.bytes\_read::.cpu.data 477213373 # Number of bytes read from this memory

system.mem\_ctrls.bytes\_read::total 2256545705 # Number of bytes read from this memory

system.mem\_ctrls.bytes\_inst\_read::.cpu.inst 1779332332 # Number of instructions bytes read from this memory

system.mem\_ctrls.bytes\_inst\_read::total 1779332332 # Number of instructions bytes read from this memory

system.mem\_ctrls.bytes\_written::.cpu.data 275069446 # Number of bytes written to this memory

system.mem\_ctrls.bytes\_written::total 275069446 # Number of bytes written to this memory

system.mem\_ctrls.num\_reads::.cpu.inst 444833083 # Number of read requests responded to by this memory

system.mem\_ctrls.num\_reads::.cpu.data 71634330 # Number of read requests responded to by this memory

system.mem\_ctrls.num\_reads::total 516467413 # Number of read requests responded to by this memory

system.mem\_ctrls.num\_writes::.cpu.data 39192788 # Number of write requests responded to by this memory

system.mem\_ctrls.num\_writes::total 39192788 # Number of write requests responded to by this memory

system.mem\_ctrls.bw\_read::.cpu.inst 7999999353 # Total read bandwidth from this memory (bytes/s)

system.mem\_ctrls.bw\_read::.cpu.data 2145583827 # Total read bandwidth from this memory (bytes/s)

system.mem\_ctrls.bw\_read::total 10145583180 # Total read bandwidth from this memory (bytes/s)

system.mem\_ctrls.bw\_inst\_read::.cpu.inst 7999999353 # Instruction read bandwidth from this memory (bytes/s)

system.mem\_ctrls.bw\_inst\_read::total 7999999353 # Instruction read bandwidth from this memory (bytes/s)

system.mem\_ctrls.bw\_write::.cpu.data 1236730964 # Write bandwidth from this memory (bytes/s)

system.mem\_ctrls.bw\_write::total 1236730964 # Write bandwidth from this memory (bytes/s)

system.mem\_ctrls.bw\_total::.cpu.inst 7999999353 # Total bandwidth to/from this memory (bytes/s)

system.mem\_ctrls.bw\_total::.cpu.data 3382314791 # Total bandwidth to/from this memory (bytes/s)

system.mem\_ctrls.bw\_total::total 11382314144 # Total bandwidth to/from this memory (bytes/s)

system.mem\_ctrls.priorityMinLatency 0.000000000000 # per QoS priority minimum request to response latency (s)

system.mem\_ctrls.priorityMaxLatency 0.000000000000 # per QoS priority maximum request to response latency (s)

system.mem\_ctrls.numReadWriteTurnArounds 0 # Number of turnarounds from READ to WRITE

system.mem\_ctrls.numWriteReadTurnArounds 0 # Number of turnarounds from WRITE to READ

system.mem\_ctrls.numStayReadState 0 # Number of times bus staying in READ state

system.mem\_ctrls.numStayWriteState 0 # Number of times bus staying in WRITE state

system.mem\_ctrls.readReqs 0 # Number of read requests accepted

system.mem\_ctrls.writeReqs 0 # Number of write requests accepted

system.mem\_ctrls.readBursts 0 # Number of DRAM read bursts, including those serviced by the write queue

system.mem\_ctrls.writeBursts 0 # Number of DRAM write bursts, including those merged in the write queue

system.mem\_ctrls.bytesReadDRAM 0 # Total number of bytes read from DRAM

system.mem\_ctrls.bytesReadWrQ 0 # Total number of bytes read from write queue

system.mem\_ctrls.bytesWritten 0 # Total number of bytes written to DRAM

system.mem\_ctrls.bytesReadSys 0 # Total read bytes from the system interface side

system.mem\_ctrls.bytesWrittenSys 0 # Total written bytes from the system interface side

system.mem\_ctrls.servicedByWrQ 0 # Number of DRAM read bursts serviced by the write queue

system.mem\_ctrls.mergedWrBursts 0 # Number of DRAM write bursts merged with an existing one

system.mem\_ctrls.neitherReadNorWriteReqs 0 # Number of requests that are neither read nor write

system.mem\_ctrls.perBankRdBursts::0 0 # Per bank write bursts

system.mem\_ctrls.perBankRdBursts::1 0 # Per bank write bursts

system.mem\_ctrls.perBankRdBursts::2 0 # Per bank write bursts

system.mem\_ctrls.perBankRdBursts::3 0 # Per bank write bursts

system.mem\_ctrls.perBankRdBursts::4 0 # Per bank write bursts

system.mem\_ctrls.perBankRdBursts::5 0 # Per bank write bursts

system.mem\_ctrls.perBankRdBursts::6 0 # Per bank write bursts

system.mem\_ctrls.perBankRdBursts::7 0 # Per bank write bursts

system.mem\_ctrls.perBankRdBursts::8 0 # Per bank write bursts

system.mem\_ctrls.perBankRdBursts::9 0 # Per bank write bursts

system.mem\_ctrls.perBankRdBursts::10 0 # Per bank write bursts

system.mem\_ctrls.perBankRdBursts::11 0 # Per bank write bursts

system.mem\_ctrls.perBankRdBursts::12 0 # Per bank write bursts

system.mem\_ctrls.perBankRdBursts::13 0 # Per bank write bursts

system.mem\_ctrls.perBankRdBursts::14 0 # Per bank write bursts

system.mem\_ctrls.perBankRdBursts::15 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::0 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::1 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::2 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::3 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::4 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::5 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::6 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::7 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::8 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::9 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::10 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::11 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::12 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::13 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::14 0 # Per bank write bursts

system.mem\_ctrls.perBankWrBursts::15 0 # Per bank write bursts

system.mem\_ctrls.numRdRetry 0 # Number of times read queue was full causing retry

system.mem\_ctrls.numWrRetry 0 # Number of times write queue was full causing retry

system.mem\_ctrls.totGap 0 # Total gap between requests

system.mem\_ctrls.readPktSize::0 0 # Read request sizes (log2)

system.mem\_ctrls.readPktSize::1 0 # Read request sizes (log2)

system.mem\_ctrls.readPktSize::2 0 # Read request sizes (log2)

system.mem\_ctrls.readPktSize::3 0 # Read request sizes (log2)

system.mem\_ctrls.readPktSize::4 0 # Read request sizes (log2)

system.mem\_ctrls.readPktSize::5 0 # Read request sizes (log2)

system.mem\_ctrls.readPktSize::6 0 # Read request sizes (log2)

system.mem\_ctrls.writePktSize::0 0 # Write request sizes (log2)

system.mem\_ctrls.writePktSize::1 0 # Write request sizes (log2)

system.mem\_ctrls.writePktSize::2 0 # Write request sizes (log2)

system.mem\_ctrls.writePktSize::3 0 # Write request sizes (log2)

system.mem\_ctrls.writePktSize::4 0 # Write request sizes (log2)

system.mem\_ctrls.writePktSize::5 0 # Write request sizes (log2)

system.mem\_ctrls.writePktSize::6 0 # Write request sizes (log2)

system.mem\_ctrls.rdQLenPdf::0 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::1 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::2 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::3 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::4 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::5 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::6 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::7 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::8 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::9 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::10 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::11 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::12 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::13 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::14 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::15 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::16 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::17 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::18 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::19 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::20 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::21 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::22 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::23 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::24 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::25 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::26 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::27 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::28 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::29 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::30 0 # What read queue length does an incoming req see

system.mem\_ctrls.rdQLenPdf::31 0 # What read queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::0 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::1 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::2 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::3 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::4 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::5 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::6 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::7 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::8 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::9 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::10 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::11 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::12 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::13 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::14 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::15 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::16 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::17 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::18 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::19 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::20 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::21 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::22 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::23 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::24 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::25 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::26 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::27 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::28 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::29 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::30 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::31 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::32 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::33 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::34 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::35 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::36 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::37 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::38 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::39 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::40 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::41 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::42 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::43 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::44 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::45 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::46 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::47 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::48 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::49 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::50 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::51 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::52 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::53 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::54 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::55 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::56 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::57 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::58 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::59 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::60 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::61 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::62 0 # What write queue length does an incoming req see

system.mem\_ctrls.wrQLenPdf::63 0 # What write queue length does an incoming req see

system.mem\_ctrls.totQLat 0 # Total ticks spent queuing

system.mem\_ctrls.totMemAccLat 0 # Total ticks spent from burst creation until serviced by the DRAM

system.mem\_ctrls.totBusLat 0 # Total ticks spent in databus transfers

system.mem\_ctrls.avgQLat nan # Average queueing delay per DRAM burst

system.mem\_ctrls.avgBusLat nan # Average bus latency per DRAM burst

system.mem\_ctrls.avgMemAccLat nan # Average memory access latency per DRAM burst

system.mem\_ctrls.avgRdBW 0.00 # Average DRAM read bandwidth in MiByte/s

system.mem\_ctrls.avgWrBW 0.00 # Average achieved write bandwidth in MiByte/s

system.mem\_ctrls.avgRdBWSys 0.00 # Average system read bandwidth in MiByte/s

system.mem\_ctrls.avgWrBWSys 0.00 # Average system write bandwidth in MiByte/s

system.mem\_ctrls.peakBW 12800.00 # Theoretical peak bandwidth in MiByte/s

system.mem\_ctrls.busUtil 0.00 # Data bus utilization in percentage

system.mem\_ctrls.busUtilRead 0.00 # Data bus utilization in percentage for reads

system.mem\_ctrls.busUtilWrite 0.00 # Data bus utilization in percentage for writes

system.mem\_ctrls.avgRdQLen 0.00 # Average read queue length when enqueuing

system.mem\_ctrls.avgWrQLen 0.00 # Average write queue length when enqueuing

system.mem\_ctrls.readRowHits 0 # Number of row buffer hits during reads

system.mem\_ctrls.writeRowHits 0 # Number of row buffer hits during writes

system.mem\_ctrls.readRowHitRate nan # Row buffer hit rate for reads

system.mem\_ctrls.writeRowHitRate nan # Row buffer hit rate for writes

system.mem\_ctrls.avgGap nan # Average gap between requests

system.mem\_ctrls.pageHitRate nan # Row buffer hit rate, read and write combined

system.mem\_ctrls\_0.actEnergy 0 # Energy for activate commands per rank (pJ)

system.mem\_ctrls\_0.preEnergy 0 # Energy for precharge commands per rank (pJ)

system.mem\_ctrls\_0.readEnergy 0 # Energy for read commands per rank (pJ)

system.mem\_ctrls\_0.writeEnergy 0 # Energy for write commands per rank (pJ)

system.mem\_ctrls\_0.refreshEnergy 0 # Energy for refresh commands per rank (pJ)

system.mem\_ctrls\_0.actBackEnergy 0 # Energy for active background per rank (pJ)

system.mem\_ctrls\_0.preBackEnergy 85407959040 # Energy for precharge background per rank (pJ)

system.mem\_ctrls\_0.actPowerDownEnergy 0 # Energy for active power-down per rank (pJ)

system.mem\_ctrls\_0.prePowerDownEnergy 0 # Energy for precharge power-down per rank (pJ)

system.mem\_ctrls\_0.selfRefreshEnergy 0 # Energy for self refresh per rank (pJ)

system.mem\_ctrls\_0.totalEnergy 85407959040 # Total energy per rank (pJ)

system.mem\_ctrls\_0.averagePower 384.000001 # Core power per rank (mW)

system.mem\_ctrls\_0.totalIdleTime 0 # Total Idle time Per DRAM Rank

system.mem\_ctrls\_0.memoryStateTime::IDLE 222416559500 # Time in different power states

system.mem\_ctrls\_0.memoryStateTime::REF 0 # Time in different power states

system.mem\_ctrls\_0.memoryStateTime::SREF 0 # Time in different power states

system.mem\_ctrls\_0.memoryStateTime::PRE\_PDN 0 # Time in different power states

system.mem\_ctrls\_0.memoryStateTime::ACT 0 # Time in different power states

system.mem\_ctrls\_0.memoryStateTime::ACT\_PDN 0 # Time in different power states

system.mem\_ctrls\_1.actEnergy 0 # Energy for activate commands per rank (pJ)

system.mem\_ctrls\_1.preEnergy 0 # Energy for precharge commands per rank (pJ)

system.mem\_ctrls\_1.readEnergy 0 # Energy for read commands per rank (pJ)

system.mem\_ctrls\_1.writeEnergy 0 # Energy for write commands per rank (pJ)

system.mem\_ctrls\_1.refreshEnergy 0 # Energy for refresh commands per rank (pJ)

system.mem\_ctrls\_1.actBackEnergy 0 # Energy for active background per rank (pJ)

system.mem\_ctrls\_1.preBackEnergy 85407959040 # Energy for precharge background per rank (pJ)

system.mem\_ctrls\_1.actPowerDownEnergy 0 # Energy for active power-down per rank (pJ)

system.mem\_ctrls\_1.prePowerDownEnergy 0 # Energy for precharge power-down per rank (pJ)

system.mem\_ctrls\_1.selfRefreshEnergy 0 # Energy for self refresh per rank (pJ)

system.mem\_ctrls\_1.totalEnergy 85407959040 # Total energy per rank (pJ)

system.mem\_ctrls\_1.averagePower 384.000001 # Core power per rank (mW)

system.mem\_ctrls\_1.totalIdleTime 0 # Total Idle time Per DRAM Rank

system.mem\_ctrls\_1.memoryStateTime::IDLE 222416559500 # Time in different power states

system.mem\_ctrls\_1.memoryStateTime::REF 0 # Time in different power states

system.mem\_ctrls\_1.memoryStateTime::SREF 0 # Time in different power states

system.mem\_ctrls\_1.memoryStateTime::PRE\_PDN 0 # Time in different power states

system.mem\_ctrls\_1.memoryStateTime::ACT 0 # Time in different power states

system.mem\_ctrls\_1.memoryStateTime::ACT\_PDN 0 # Time in different power states

system.pwrStateResidencyTicks::UNDEFINED 222416559500 # Cumulative time (in ticks) in various power states

system.cpu\_voltage\_domain.voltage 1 # Voltage in Volts

system.cpu\_clk\_domain.clock 500 # Clock period in ticks

system.cpu.dtb.fetch\_hits 0 # ITB hits

system.cpu.dtb.fetch\_misses 0 # ITB misses

system.cpu.dtb.fetch\_acv 0 # ITB acv

system.cpu.dtb.fetch\_accesses 0 # ITB accesses

system.cpu.dtb.read\_hits 71634330 # DTB read hits

system.cpu.dtb.read\_misses 21 # DTB read misses

system.cpu.dtb.read\_acv 0 # DTB read access violations

system.cpu.dtb.read\_accesses 71634351 # DTB read accesses

system.cpu.dtb.write\_hits 39192788 # DTB write hits

system.cpu.dtb.write\_misses 5 # DTB write misses

system.cpu.dtb.write\_acv 0 # DTB write access violations

system.cpu.dtb.write\_accesses 39192793 # DTB write accesses

system.cpu.dtb.data\_hits 110827118 # DTB hits

system.cpu.dtb.data\_misses 26 # DTB misses

system.cpu.dtb.data\_acv 0 # DTB access violations

system.cpu.dtb.data\_accesses 110827144 # DTB accesses

system.cpu.itb.fetch\_hits 444833083 # ITB hits

system.cpu.itb.fetch\_misses 37 # ITB misses

system.cpu.itb.fetch\_acv 0 # ITB acv

system.cpu.itb.fetch\_accesses 444833120 # ITB accesses

system.cpu.itb.read\_hits 0 # DTB read hits

system.cpu.itb.read\_misses 0 # DTB read misses

system.cpu.itb.read\_acv 0 # DTB read access violations

system.cpu.itb.read\_accesses 0 # DTB read accesses

system.cpu.itb.write\_hits 0 # DTB write hits

system.cpu.itb.write\_misses 0 # DTB write misses

system.cpu.itb.write\_acv 0 # DTB write access violations

system.cpu.itb.write\_accesses 0 # DTB write accesses

system.cpu.itb.data\_hits 0 # DTB hits

system.cpu.itb.data\_misses 0 # DTB misses

system.cpu.itb.data\_acv 0 # DTB access violations

system.cpu.itb.data\_accesses 0 # DTB accesses

system.cpu.workload.numSyscalls 167539 # Number of system calls

system.cpu.pwrStateResidencyTicks::ON 222416559500 # Cumulative time (in ticks) in various power states

system.cpu.numCycles 444833120 # 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.committedInsts 444833057 # Number of instructions committed

system.cpu.committedOps 444833057 # Number of ops (including micro ops) committed

system.cpu.num\_int\_alu\_accesses 428420383 # Number of integer alu accesses

system.cpu.num\_fp\_alu\_accesses 3069064 # Number of float alu accesses

system.cpu.num\_vec\_alu\_accesses 0 # Number of vector alu accesses

system.cpu.num\_func\_calls 12302405 # number of times a function call or return occured

system.cpu.num\_conditional\_control\_insts 46966307 # number of instructions that are conditional controls

system.cpu.num\_int\_insts 428420383 # number of integer instructions

system.cpu.num\_fp\_insts 3069064 # number of float instructions

system.cpu.num\_vec\_insts 0 # number of vector instructions

system.cpu.num\_int\_register\_reads 631484715 # number of times the integer registers were read

system.cpu.num\_int\_register\_writes 336126519 # number of times the integer registers were written

system.cpu.num\_fp\_register\_reads 3630971 # number of times the floating registers were read

system.cpu.num\_fp\_register\_writes 1772082 # number of times the floating registers were written

system.cpu.num\_vec\_register\_reads 0 # number of times the vector registers were read

system.cpu.num\_vec\_register\_writes 0 # number of times the vector registers were written

system.cpu.num\_mem\_refs 110827144 # number of memory refs

system.cpu.num\_load\_insts 71634351 # Number of load instructions

system.cpu.num\_store\_insts 39192793 # Number of store instructions

system.cpu.num\_idle\_cycles 0 # Number of idle cycles

system.cpu.num\_busy\_cycles 444833120 # Number of busy cycles

system.cpu.not\_idle\_fraction 1 # Percentage of non-idle cycles

system.cpu.idle\_fraction 0 # Percentage of idle cycles

system.cpu.Branches 65078964 # Number of branches fetched

system.cpu.op\_class::No\_OpClass 8646356 1.94% 1.94% # Class of executed instruction

system.cpu.op\_class::IntAlu 321159161 72.20% 74.14% # Class of executed instruction

system.cpu.op\_class::IntMult 2406685 0.54% 74.68% # Class of executed instruction

system.cpu.op\_class::IntDiv 0 0.00% 74.68% # Class of executed instruction

system.cpu.op\_class::FloatAdd 897130 0.20% 74.88% # Class of executed instruction

system.cpu.op\_class::FloatCmp 191234 0.04% 74.93% # Class of executed instruction

system.cpu.op\_class::FloatCvt 281149 0.06% 74.99% # Class of executed instruction

system.cpu.op\_class::FloatMult 204955 0.05% 75.04% # Class of executed instruction

system.cpu.op\_class::FloatMultAcc 0 0.00% 75.04% # Class of executed instruction

system.cpu.op\_class::FloatDiv 60615 0.01% 75.05% # Class of executed instruction

system.cpu.op\_class::FloatMisc 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::FloatSqrt 4361 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdAdd 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdAddAcc 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdAlu 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdCmp 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdCvt 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdMisc 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdMult 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdMultAcc 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdShift 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdShiftAcc 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdSqrt 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdFloatAdd 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdFloatAlu 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdFloatCmp 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdFloatCvt 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdFloatDiv 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdFloatMisc 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdFloatMult 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdFloatMultAcc 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdFloatSqrt 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdAes 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdAesMix 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdSha1Hash 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdSha1Hash2 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdSha256Hash 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdSha256Hash2 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdShaSigma2 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::SimdShaSigma3 0 0.00% 75.05% # Class of executed instruction

system.cpu.op\_class::MemRead 71215571 16.01% 91.06% # Class of executed instruction

system.cpu.op\_class::MemWrite 38336246 8.62% 99.68% # Class of executed instruction

system.cpu.op\_class::FloatMemRead 573072 0.13% 99.81% # Class of executed instruction

system.cpu.op\_class::FloatMemWrite 856548 0.19% 100.00% # Class of executed instruction

system.cpu.op\_class::IprAccess 0 0.00% 100.00% # Class of executed instruction

system.cpu.op\_class::InstPrefetch 0 0.00% 100.00% # Class of executed instruction

system.cpu.op\_class::total 444833083 # Class of executed instruction

system.membus.snoop\_filter.tot\_requests 0 # Total number of requests made to the snoop filter.

system.membus.snoop\_filter.hit\_single\_requests 0 # Number of requests hitting in the snoop filter with a single holder of the requested data.

system.membus.snoop\_filter.hit\_multi\_requests 0 # Number of requests hitting in the snoop filter with multiple (>1) holders of the requested data.

system.membus.snoop\_filter.tot\_snoops 0 # Total number of snoops made to the snoop filter.

system.membus.snoop\_filter.hit\_single\_snoops 0 # Number of snoops hitting in the snoop filter with a single holder of the requested data.

system.membus.snoop\_filter.hit\_multi\_snoops 0 # Number of snoops hitting in the snoop filter with multiple (>1) holders of the requested data.

system.membus.pwrStateResidencyTicks::UNDEFINED 222416559500 # Cumulative time (in ticks) in various power states

system.membus.trans\_dist::ReadReq 516313121 # Transaction distribution

system.membus.trans\_dist::ReadResp 516467413 # Transaction distribution

system.membus.trans\_dist::WriteReq 39038496 # Transaction distribution

system.membus.trans\_dist::WriteResp 39038496 # Transaction distribution

system.membus.trans\_dist::LoadLockedReq 154292 # Transaction distribution

system.membus.trans\_dist::StoreCondReq 154292 # Transaction distribution

system.membus.trans\_dist::StoreCondResp 154292 # Transaction distribution

system.membus.pkt\_count\_system.cpu.icache\_port::system.mem\_ctrls.port 889666166 # Packet count per connected master and slave (bytes)

system.membus.pkt\_count\_system.cpu.dcache\_port::system.mem\_ctrls.port 221654236 # Packet count per connected master and slave (bytes)

system.membus.pkt\_count::total 1111320402 # Packet count per connected master and slave (bytes)

system.membus.pkt\_size\_system.cpu.icache\_port::system.mem\_ctrls.port 1779332332 # Cumulative packet size per connected master and slave (bytes)

system.membus.pkt\_size\_system.cpu.dcache\_port::system.mem\_ctrls.port 752282819 # Cumulative packet size per connected master and slave (bytes)

system.membus.pkt\_size::total 2531615151 # Cumulative packet size per connected master and slave (bytes)

system.membus.snoops 0 # Total snoops (count)

system.membus.snoopTraffic 0 # Total snoop traffic (bytes)

system.membus.snoop\_fanout::samples 555660201 # 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 555660201 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 555660201 # Request fanout histogram

---------- End Simulation Statistics ----------