Parameterized Model Inputs

1. Global Options

1.1. Number of Threads

a) total (integer)

1.2. Homogeneous Threads

a) true (bool)

b) false (bool)

2. Thread Specific Options

2.1. Transaction Granularity

a) average transaction instruction count (float)

b) time series of transaction instruction counts (integer list)

c) normalized histogram of transaction instruction counts (float list)

2.2. Transaction Stride

a) average sequential instruction count (float)

b) time series of sequential instruction counts (integer list)

c) normalized histogram of sequential instruction counts (float list)

2.3. Read Set Size

a) average number of unique transactional loads (float)

b) time series of unique loads per transaction (integer list)

c) normalized histogram of unique loads per transaction (float list)

2.4. Write Set Size

a) average number of unique transactional writes (float)

b) time series of unique writes per transaction (integer list)

c) normalized histogram of unique writes per transaction (float list)

2.5. Shared (Conflict-able) Memory Per Transaction

a) complete - = 100% (string)

b) high - random amount >= 50% (string)

c) low - random amount < 50% (string)

d) minimal – at least one per transaction (string)

e) none - = 0% (string)

f) time series of complete/high/low/minimal/none values (string list)

g) normalized histogram of complete/high/low/minimal/none (float list – 5 entries)

2.6. Conflict Distribution Model

a) high – shared memory read near begin, write near end (string)

b) random (string)

c) time series of high/random values (string list)

d) normalized histogram of high/random values (float list – 2 entries)

2.7. Target Transactional Instruction Mix*

a) normalized MEM / INT / FP (float list – 3 entries)

2.8. Target Sequential Instruction Mix*

a) normalized MEM / INT / FP (float list – 3 entries)

* Note that the instruction mix is a target that will be satisfied on a per transaction basis after the minimum number of reads/writes have been achieved within the constraints of the transaction granularity.