	base	optimize	average IPC improvement %
core 0 ins	40959334	40960190	0.1513786423
core 0 cycle	51574552	51497937	
core 1 ins	40775651	40776932	
core 1 cycle	51142532	51066574	
core 0 IPC	0.7941772136	0.7953753565	
core 1 IPC	0.7972943342	0.7985053393	
I1d-0 upgrade miss	5542	11	
I1d-0 INV	5569	5150	
I1d-0 INVX	5608	82	
I1d-1 upgrade miss	5542	13	
I1d-1 INV	5561	5146	
I1d-1 INVX	5540	6	
I2-0 upgrade miss	5542	11	
12-0 INV	5569	5150	
I2-0 INVX	5638	113	
I2-1 upgrade miss	5541	13	
I2-1 INV	5561	5146	
I2-1 INVX	5540	6	

	base	optimize	average IPC improvement %
core 0 ins	40848255	40848255	-0.001147717365
core 0 cycle	51297351	51297164	
core 1 ins	40478789	40478789	
core 1 cycle	50444215	50445551	
core 0 IPC	0.7963033998	0.7963063026	
core 1 IPC	0.8024466036	0.8024253516	
I1d-0 upgrade miss	5477	5825	
I1d-0 INV	12	17	
I1d-0 INVX	5544	5893	
I1d-1 upgrade miss	9	9	
I1d-1 INV	5478	5827	
I1d-1 INVX	4	3	
I2-0 upgrade miss	5477	5825	
I2-0 INV	12	12	
I2-0 INVX	5576	5926	
I2-1 upgrade miss	9	9	
I2-1 INV	5478	5827	
I2-1 INVX	4	3	

	base	optimize	average IPC improvement %
core 0 ins	101414640	101414944	0.1543741893
core 0 cycle	128525342	128328283	
core 1 ins	101227078	101227243	
core 1 cycle	128102355	127904454	
core 0 IPC	0.789063374	0.7902774169	
core 1 IPC	0.790204661	0.7914286003	
I1d-0 upgrade miss	36214	9	
I1d-0 INV	36358	35348	
I1d-0 INVX	36273	91	
I1d-1 upgrade miss	36206	18	
I1d-1 INV	36350	35349	
I1d-1 INVX	36201	3	
I2-0 upgrade miss	36212	9	
I2-0 INV	36358	35350	
I2-0 INVX	36300	120	
I2-1 upgrade miss	36201	18	
I2-1 INV	36350	35349	
I2-1 INVX	36201	3	

	base	optimize	average IPC improvement %
core 0 ins	105487777	105492247	0.1302873499
core 0 cycle	131609804	131444466	
core 1 ins	105303021	105310317	
core 1 cycle	131192108	131030143	
core 0 IPC	0.8015191406	0.8025613418	
core 1 IPC	0.8026627715	0.8037106164	
I1d-0 upgrade miss	37756	17	
I1d-0 INV	38012	34803	
I1d-0 INVX	37779	86	
I1d-1 upgrade miss	37726	20	
I1d-1 INV	38006	34792	
I1d-1 INVX	37750	14	
I2-0 upgrade miss	37755	17	
I2-0 INV	38012	34803	
I2-0 INVX	37810	120	
I2-1 upgrade miss	37720	20	
I2-1 INV	38006	34792	
I2-1 INVX	37750	14	

	base	optimize	average IPC improvement %
core 0 ins	105473191	105473152	0.002278383362
core 0 cycle	131292665	131290458	
core 1 ins	104077090	104077044	
core 1 cycle	128027300	128023524	
core 0 IPC	0.8033441244	0.8033573316	
core 1 IPC	0.8129288831	0.8129525008	
I1d-0 upgrade miss	37846	17	
I1d-0 INV	447	37897	
I1d-0 INVX	37916	86	
I1d-1 upgrade miss	443	18	
I1d-1 INV	37848	37897	
I1d-1 INVX	438	11	
I2-0 upgrade miss	37846	17	
I2-0 INV	447	37898	
I2-0 INVX	37946	121	
I2-1 upgrade miss	443	18	
I2-1 INV	37848	37897	
I2-1 INVX	438	11	

	base	optimize	average IPC improvement %
core 0 ins	104260413	104260600	-0.5407563013
core 0 cycle	127778163	128481455	
core 1 ins	104077044	104077217	
core 1 cycle	127345461	128029753	
core 0 IPC	0.8159485984	0.8114836495	
core 1 IPC	0.8172811436	0.8129142997	
I1d-0 upgrade miss	455	17	
I1d-0 INV	466	38156	
I1d-0 INVX	533	87	
I1d-1 upgrade miss	463	18	
I1d-1 INV	456	38147	
I1d-1 INVX	458	11	
I2-0 upgrade miss	455	17	
12-0 INV	466	38156	
I2-0 INVX	564	121	
I2-1 upgrade miss	463	18	
I2-1 INV	456	38147	
I2-1 INVX	458	11	