

Test Suite 7a: Varying Machine Width, Number of Integer ALUs, and Branch Prediction for In-Order Instruction Execution												
	Width	Int ALU	Int Multiplier	Memory Port	FP ALU	FP Multiplier	Prediction	Instruction Issue	CPI	Speedup	Cost	Weighted Speedup
1	1	1	1	1	1	1	taken	in-order	2.2941	1.0000	1350	0.7407
2	1	2	1	1	1	1	taken	in-order	2.2941	1.0000	1450	0.6897
3	1	3	1	1	1	1	taken	in-order	2.2941	1.0000	1550	0.6452
4	1	4	1	1	1	1	taken	in-order	2.2941	1.0000	1650	0.6061
5	2	1	1	1	1	1	taken	in-order	2.1364	1.0738	1600	0.6711
6	2	2	1	1	1	1	taken	in-order	2.0677	1.1095	1700	0.6526
7	2	3	1	1	1	1	taken	in-order	2.0677	1.1095	1800	0.6164
8	2	4	1	1	1	1	taken	in-order	2.0677	1.1095	1900	0.5839
9	4	1	1	1	1	1	taken	in-order	1.9832	1.1568	2100	0.5508
10	4	2	1	1	1	1	taken	in-order	1.9188	1.1956	2200	0.5435
11	4	3	1	1	1	1	taken	in-order	1.9114	1.2002	2300	0.5218
12	4	4	1	1	1	1	taken	in-order	1.9104	1.2008	2400	0.5004
13	1	1	1	1	1	1	not taken	in-order	2.2941	1.0000	1350	0.7407
14	1	2	1	1	1	1	not taken	in-order	2.2941	1.0000	1450	0.6897
15	1	3	1	1	1	1	not taken	in-order	2.2941	1.0000	1550	0.6452
16	1	4	1	1	1	1	not taken	in-order	2.2941	1.0000	1650	0.6061
17	2	1	1	1	1	1	not taken	in-order	2.1385	1.0728	1600	0.6705
18	2	2	1	1	1	1	not taken	in-order	2.0763	1.1049	1700	0.6499
19	2	3	1	1	1	1	not taken	in-order	2.0763	1.1049	1800	0.6138
20	2	4	1	1	1	1	not taken	in-order	2.0763	1.1049	1900	0.5815
21	4	1	1	1	1	1	not taken	in-order	1.9868	1.1547	2100	0.5498
22	4	2	1	1	1	1	not taken	in-order	1.9261	1.1911	2200	0.5414
23	4	3	1	1	1	1	not taken	in-order	1.9202	1.1947	2300	0.5194
24	4	4	1	1	1	1	not taken	in-order	1.9194	1.1952	2400	0.4980
25	1	1	1	1	1	1	2lev	in-order	2.0068	1.1432	1800	0.6351
26	1	2	1	1	1	1	2lev	in-order	2.0068	1.1432	1900	0.6017
27	1	3	1	1	1	1	2lev	in-order	2.0068	1.1432	2000	0.5716
28	1	4	1	1	1	1	2lev	in-order	2.0068	1.1432	2100	0.5444
29	2	1	1	1	1	1	2lev	in-order	1.8579	1.2348	2050	0.6023
30	2	2	1	1	1	1	2lev	in-order	1.7862	1.2843	2150	0.5974
31	2	3	1	1	1	1	2lev	in-order	1.7862	1.2843	2250	0.5708
32	2	4	1	1	1	1	2lev	in-order	1.7862	1.2843	2350	0.5465
33	4	1	1	1	1	1	2lev	in-order	1.6972	1.3517	2550	0.5301
34	4	2	1	1	1	1	2lev	in-order	1.6257	1.4111	2650	0.5325
35	4	3	1	1	1	1	2lev	in-order	1.6175	1.4183	2750	0.5157
36	4	4	1	1	1	1	2lev	in-order	1.6163	1.4194	2850	0.4980