

Trans1 vs. Trans2

(without further optimizations)

Example	Version	StateVector (byte)	#stored states	#matched states	#transitions	depth	totalMemory (MByte)	time (sec)
HalfAdder	Trans1	44	14	0	14	17	2.501	0
	Trans2	40	22	0	22	25	2.501	0
-DNOREDUCE	Trans1\POR	44	14	0	14,stop	17	2.501	0
FullAdder	Trans1	128	97	0	97	130	2.501	0.01
	Trans2	116	178	0	178	211	2.501	0.01
-DNOREDUCE	Trans1\POR	128	97	0	97,stop	130	2.501	0
Adder [_X]	Trans1	224	9083	517	9600	2336	3.868	0.07
	Trans2	192	11067	517	11584	2864	3.770	0.05
-DNOREDUCE	Trans1\POR	224	12222	5919	18141	2336	4.258	0.1
RedundantBatterySystem2	Trans1	164	13438	4921	18359	9999ok	4.649	0.12
	Trans2	128	7833+	1+	7834+	9999err	3.379+	0.05+
pan -m1000000	Trans2+	128	1007794	13585	1021379	526019	136.815	3.14
-DNOREDUCE	Trans1\POR	164	13438	6216	19654	9999ok	4.649	0.11
TransitionChangesDataport	Trans1	224	148	0	148	192	2.501	0.01
	Trans2	136	201	0	201	243	2.501	0.01
-DNOREDUCE	Trans1\POR	224	148	0	148,stop	192	2.501	0

Trans2 has a little smaller state vector but induces much more states (Why? Is one global variable less efficient than two local copies?).

⌚ May be the best solution: combination of Trans1 + Trans2, i.e. global variables in Trans2 naming schema for LTL property but with declarator “local” and data exchange between process via messages.