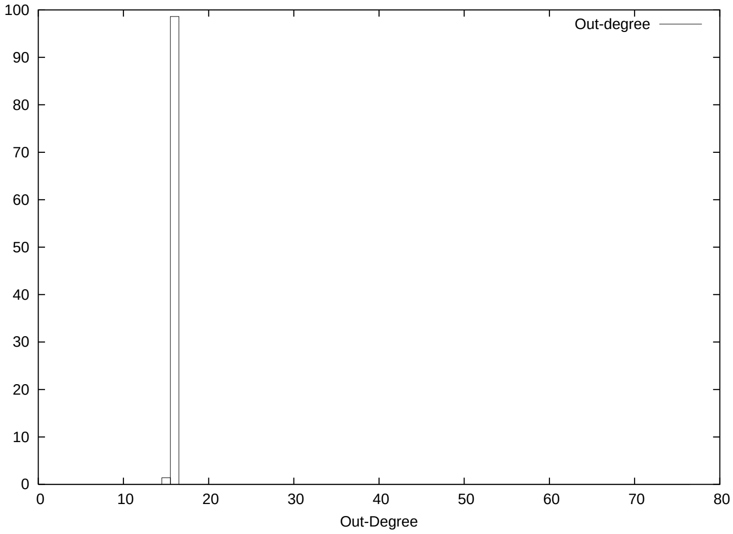
Graph: nusmv/adder

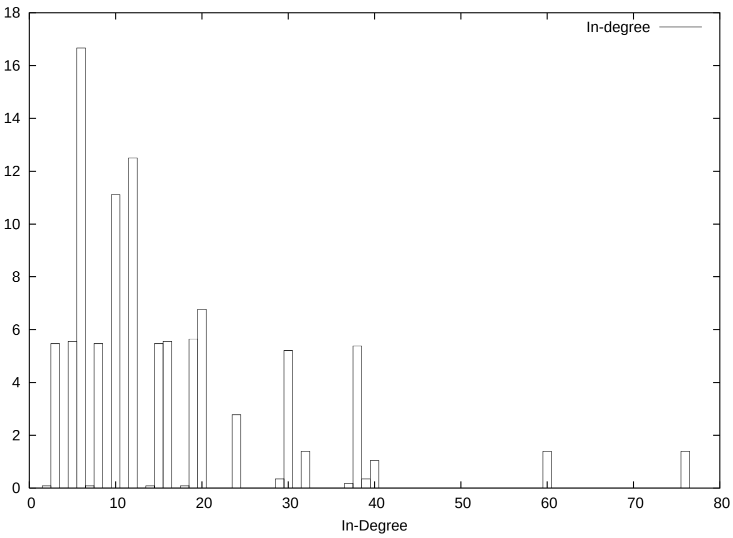
General Info

Example title	Adder (circuit)
Parameter	
Reduction	
Modification	
States	1,152
Edges	18,416
Average degree	15.9

Out-Degrees distribution:



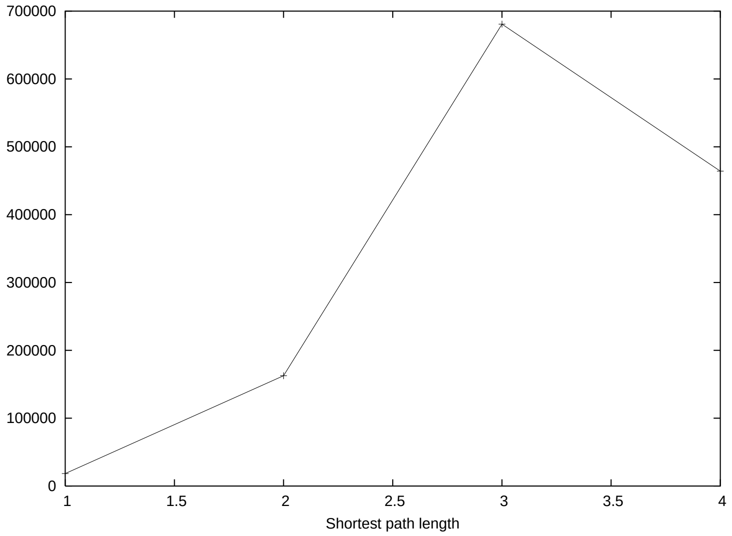
In-Degrees distribution:



Shortest Paths Info

Diameter: 4
Average shortest path length: 3.1997

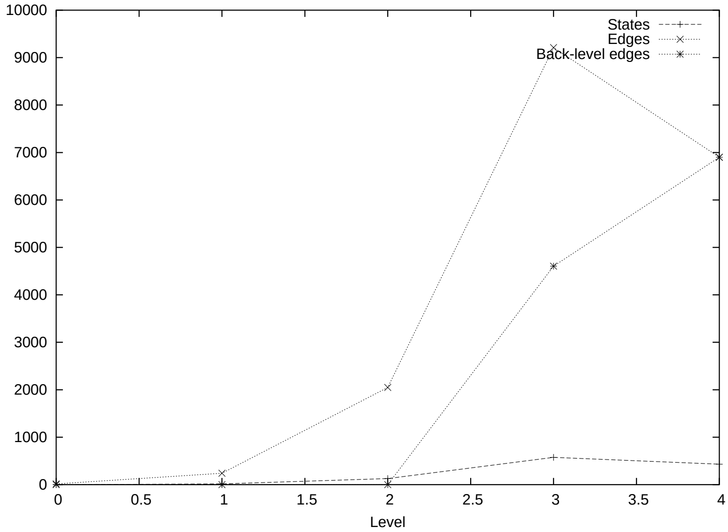
Shortest paths lengths frequencies:



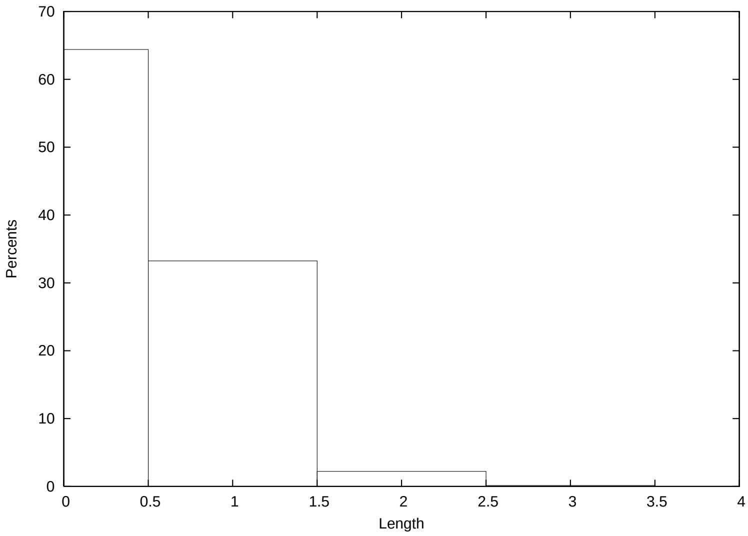
BFS Info

BFS height	4
BFS width	576 (50%)
Back level edges	11,505 (62.4%)

BFS level info:



Back level edges lengths:



SCC Info

SCC components	1
SCC quetient height	0
SCC quetient nontrivial height	0
Number of terminal components	1
The largest component is	initial the only terminal

Statistics according to **sizes**:

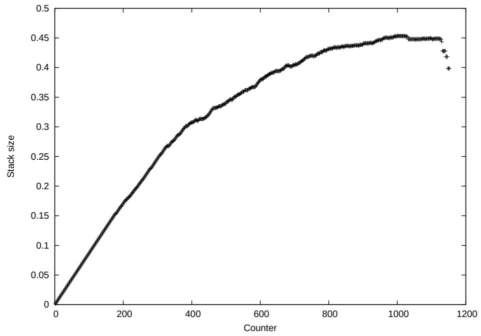
Size	Number of components	Number of states here
1,152	1	100%

SCC component graph (part):

DFS Info

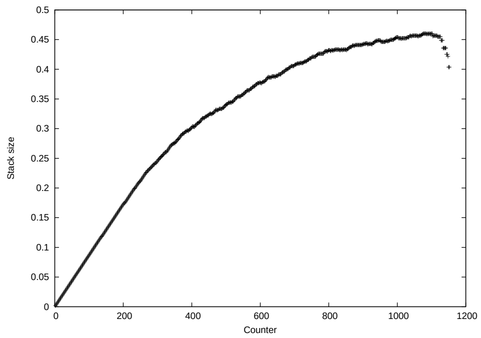
Run 0

front-edges : back-edges : cross-edges = 1,151 : 8,559 : 8,706 = 6.2%:46.4%:47.2%
Max. stack size: 523 (45.3%)
Shortest cycle detected: 2
Most often detected lengths of cycles: 65 (39), 21 (38), 37 (37), 291 (35), 120 (33)
Stack graph:



Run 1

front-edges : back-edges : cross-edges = 1,151 : 8,558 : 8,707 = 6.2%:46.4%:47.2%
Max. stack size: 530 (46%)
Shortest cycle detected: 2
Most often detected lengths of cycles: 110 (36), 242 (35), 142 (34), 128 (34), 183 (33)
Stack graph:



Local Structure

Short cycles(up to 6)

2	140	(12.1%)
3	603	(52.3%)
4	409	(35.5%)

Diamonds

1,152 (100%)

Neighborhoods

k	avg size	avg clustering
1	16.9	1
2	158	1.7
3	749.1	3.3
4	1152	10.4

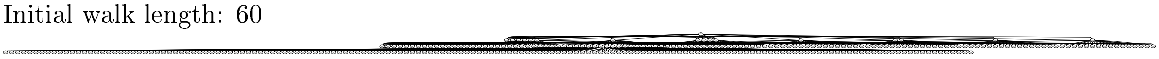
Visualization of some parts of the state state space:

Initial walk length: 0

Initial walk length: 20

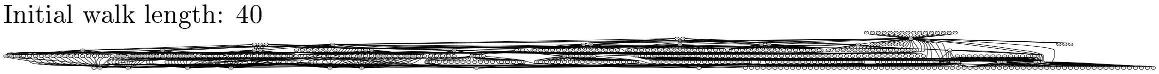
Initial walk length: 40

Initial walk length: 60



Initial walk length: 20

Initial walk length: 40



Initial walk length: 60