ECE 538: VLSI System Testing

Assignment 4

Alexander Zapata April 19, 2019

Duke Community Standard

By submitting this LaTeX document, I affirm that

1. I have adhered to the Duke Community Standard in completing this assignment.

${f Problem}\,\,{f 1}\,\,{f Path}\,\,{f Delay}\,\,{f and}\,\,{f Small}\,\,{f Delay}\,\,{f Defect}\,\,{f Testing}\,\,{f using}\,\,{f Synopsys}\,\,{f TetraMax};$

a.

(i)

Number of Critical Paths	50	100	150	200	250	300
Total Faults	50	100	150	200	250	300
Detected	44	82	123	128	129	128
Test Coverage	88.00%	82.00%	82.00%	64.00%	51.60%	42.67%
Patterns	9	18	19	19	19	18
CPU Time	0.02	0.02	0.03	0.02	0.03	0.05

Table 1: Results for path-delay faults, 0.15ns clock period