

CSE435 Introduction to EDA & Testing - Spring 2022

Homework Assignment #5

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About Path-Oriented Decision Making (PODEM), please answer the following questions according to Figure 1.

1-4 PODEM (See Figure 1)

1. (15%) Derive the effective test set for G5 SA0 by PODEM

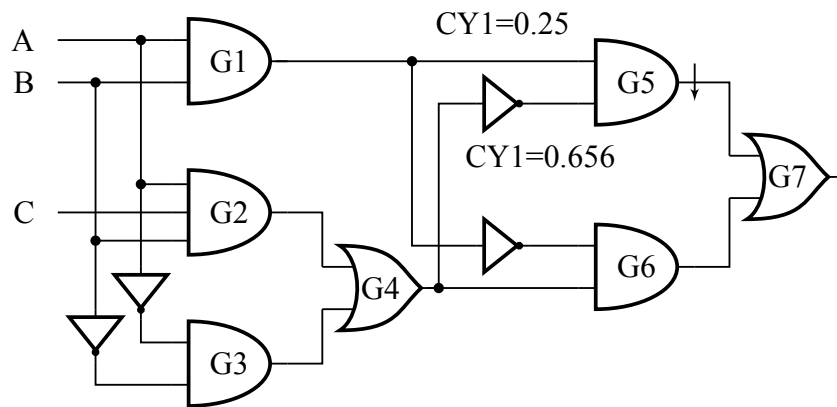


Figure 1

Solution:

2. (15%) Derive the effective test set for G5 SA0 by PODEM with More Intelligent Backtracing

Solution:

3. (15%) Derive the effective test set for G5 SA0 by PODEM with Unguided Backtracing

Solution:

4. (15%) Please compare the above (1), (2), (3). [Chapter 10, slides 7-23]

Solution:

5. (15%) What are the difference between Backtracking and Backtracing? Please show by example.

Solution:

6. (25%) FAN (See Figure 2)

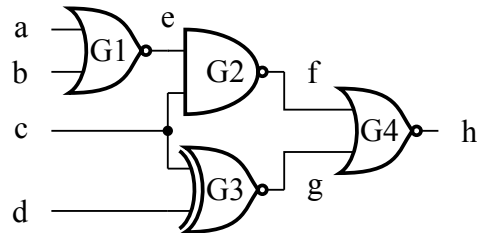


Figure 2

- (a) (15%) Generate a test for the fault f-sa1 by using FAN algorithm.

Solution:

- (b) (10%) What are the differences between PODEM and FAN?

Solution: