



USER'S MANUAL

Test Case Generator

January, 2019

Revision Sheet

Release No.	Date	Revision Description	Writer
Rev. 0	23/12/17	User's Manual Created	Ercüment TÜRK
Rev. 1	05/01/19	Added FPGA inputs table	Ercüment TÜRK

USER'S MANUAL

TABLE OF CONTENTS

	<u>Page #</u>
1.0 GENERAL INFORMATION	1-1
1.1 System Overview	1-1
1.2 Acronyms and Abbreviations	1-1
2.0 Program SUMMARY	2-1
2.1 Program Summary	2-1
3.0 GETTING STARTED	3-1
3.1 Launch the Program	3-1
4.0 USING the RESULTS	4-1
4.1 Results	4-1
4.1.1 All Test Cases	4-1
4.1.2 All Optimization Symbol	4-1
4.1.3 All Optimized Test Cases	4-1
4.1.4 Forward Right Decoded (FPGA) Test Cases	4-1
4.1.5 Forward Left Decoded (FPGA) Test Cases	4-1

1.0 GENERAL INFORMATION

1.0 GENERAL INFORMATION

1.1 System Overview

The “Test Case Generator” is designed to generate and show the all FSM test cases and optimized test cases. It accept “result.txt” which is created by “PQAnalysis” as an input. After program starts, “Forward Right Test Cases” and “Forward Left Test Cases” are stored in different text files.

1.2 Acronyms and Abbreviations

FSM - Finite State Machine

2.0 SYSTEM SUMMARY

2.0 PROGRAM SUMMARY

2.1 Program Summary

To keep everything simple, the main GUI consists of 5 main parts; which are enumerated below:

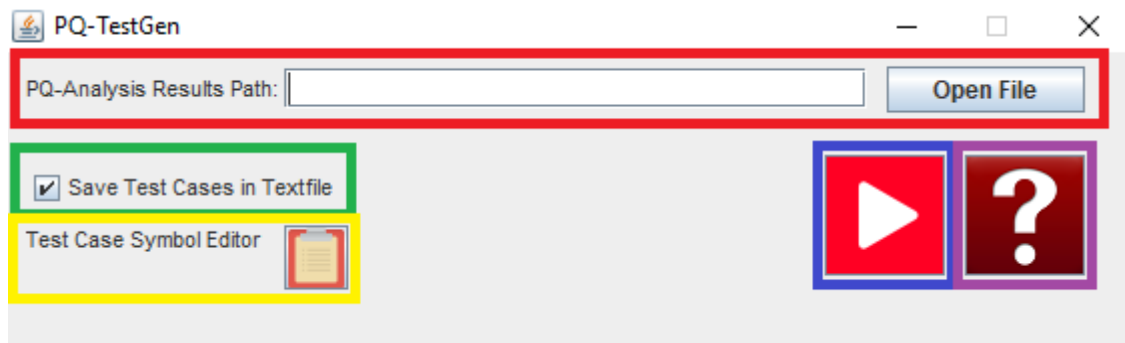


Figure 1

1. **Red** → PQAnalysis result path
2. **Green** → Save results of Test Case Generator into files
3. **Blue** → Start Test Case Generator
4. **Purple** → Help
5. **Yellow** → Open symbol editor for FPGA or other pltforms

3.0 GETTING STARTED

3.0 GETTING STARTED

3.1 Launch the Program

We first start by running “Test Case Generator.jar”. This will begin the “Test Case Generator”.



Figure 2

When the program is opened, a screen like Figure 3 welcomes us,
 -Click “Open File” > on the program to load “Result.txt”

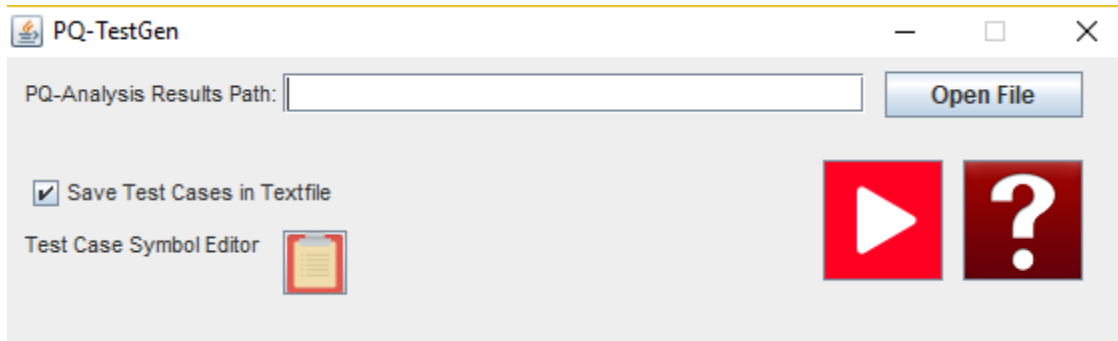


Figure 3

- The “Result.txt” file is selected from the file dialog screen. As seen in Figure 4

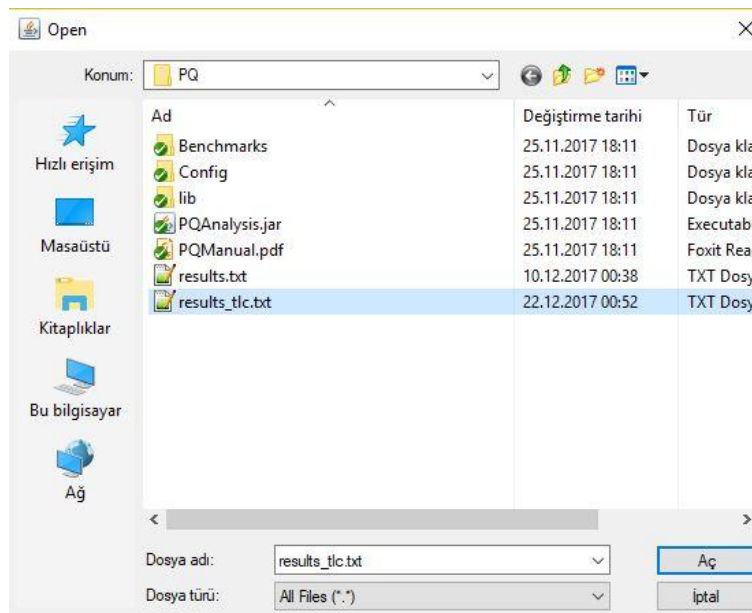


Figure 4

-Click “Play Button >” on the program to generate all test cases and optimum test cases (Figure 5)

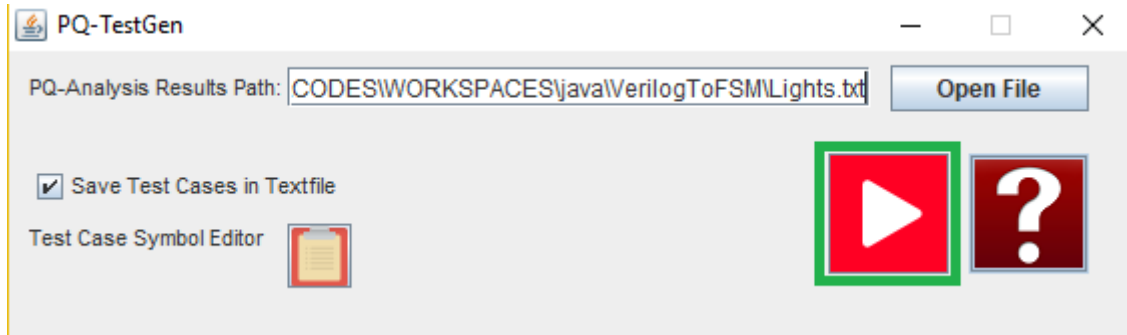


Figure 5

Note: “Save Test Cases in Textfile” selection must be enabled to store results.

After generate procedure finishes, two text file are created in same file with the program. (Figure 6)

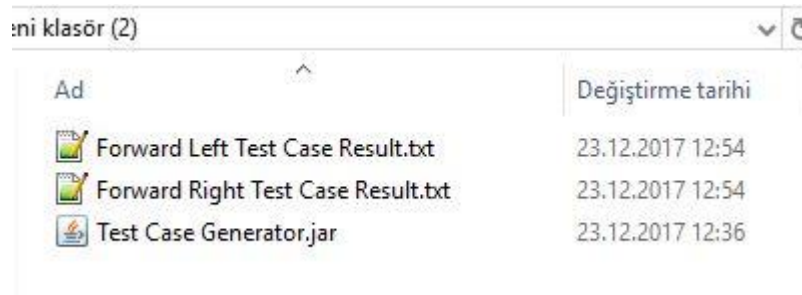


Figure 6

-Click “Help Button >” to see this manual. (Figure 7)

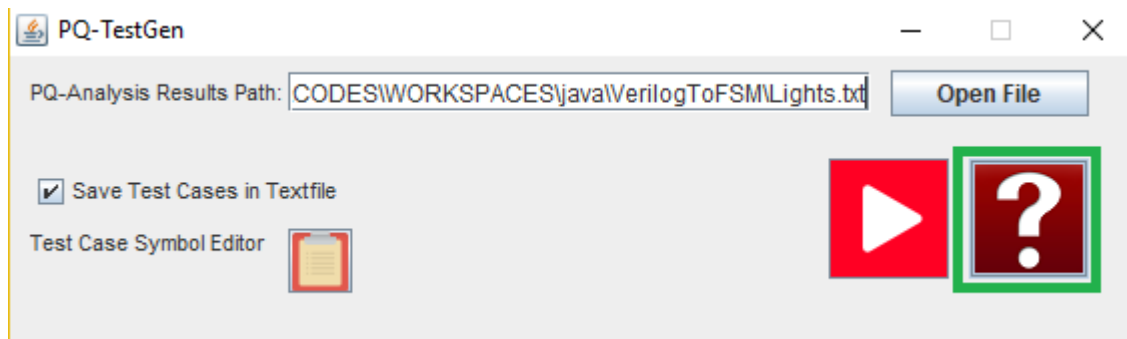


Figure 7

-Click “Test Case Symbol Editor” Button to set the test symbols and their encoding scheme (Figure 8).

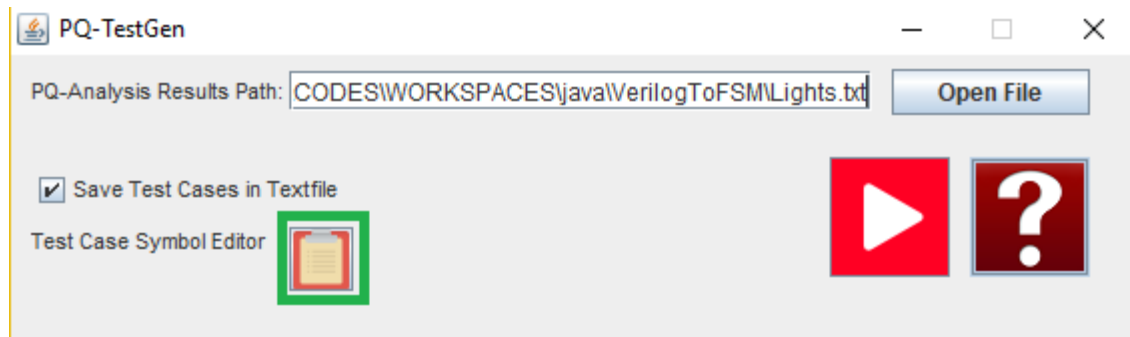


Figure 8

When you click the “Test Case Symbol Editor” Button, a table arises. (Figure 9)

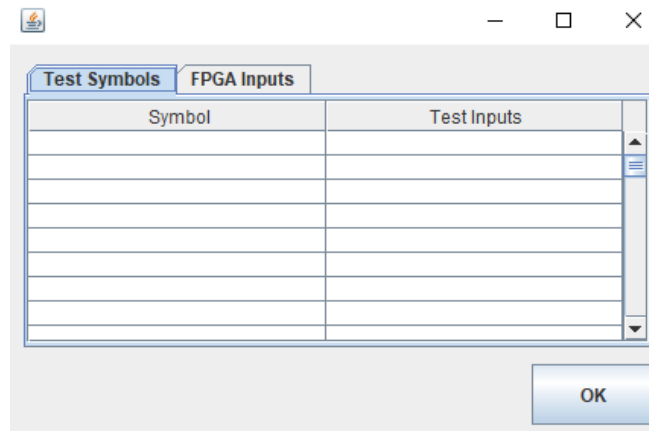


Figure 9

You can encode all test symbols in this table (Figure 10).

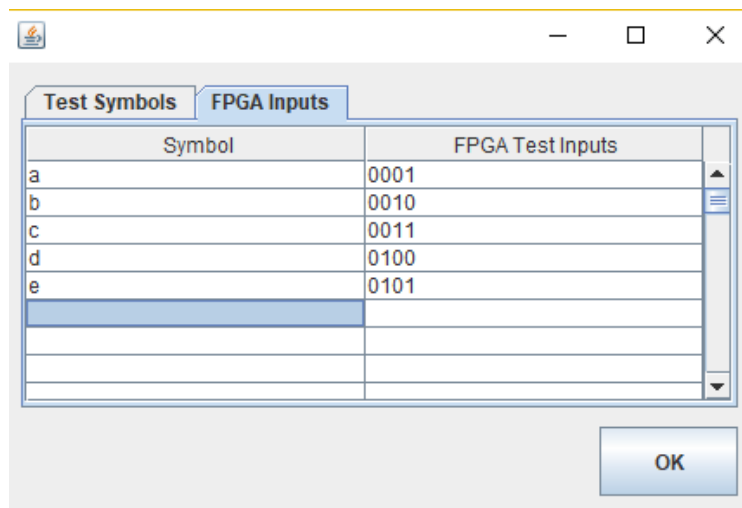


Figure 10

4.0 USING THE RESULTS

4.0 USING THE RESULTS

4.1 Results

The results are stored in two different files.

All test cases, all optimization symbols and all optimized test cases about Forward Left Table are stored in “Forward Left Test Case Result.txt”.

All test cases, all optimization symbols and all optimized test cases about Forward Right Table are stored in “Forward Right Test Case Result.txt”.

4.1.1 All Test Cases

“All Test Cases” includes unoptimized test cases.

4.1.2 All Optimization Symbol

This section is only information about optimization steps. It will not use in test procedure.

4.1.3 All Optimized Test Cases

“All Optimized Test Cases” section includes the tests that occur after the optimization process.

4.1.4 Forward Right Decoded (FPGA) Test Cases

This file includes Forward Right Tests for FPGA platform input.

4.1.5 Forward Left Decoded (FPGA) Test Cases

This file includes Forward Left Tests for FPGA platform input.