

Technical Data

9100A-020

TL/1 Test Language Checker

Use Your PC to Check 9100A Programs

A personal computer is an excellent tool on which to develop test programs for the Fluke 9100A Digital Test System. The 9100A uses programs written in the TL/1 test language to provide functional testing and fault isolation of digital boards.

TL/1, the programming language for the 9100A, is a high-level, structured language with BASIC-like statements, and it is oriented specifically toward developing test and troubleshooting routines. Although these programs can be written on a 9100A with a Programmer's Station, some programmers prefer to use an environment with which they are more familiar and comfortable—such as a personal computer (PC). The TL/1 Test Language Checker brings the 9100A's Check function to the PC. It checks for function call consistency and syntax errors, thus making sure your TL/1 programs will be compatible with the interpreter before you download them to the 9100A. Debugging is still performed on the 9100A with a programmer's station.

Operation

Write your 9100A program as usual, using your favorite text editor or any word processor that can save text in ASCII format. When you're ready to check your program, save it as an ASCII file, exit from the word processor or text editor, and run TLC on your program file.



TLC produces a comprehensive error summary, which lists a precise description of each error. For example, the error summary for the illustrated program "abc", indicates the program name on the left, the line number on which the error was detected followed by the precise error listing.

program abc(arg1, arg2)	abc. (5): syntax error
numeric arg1	abc. (6): operands of '='
string s1	have incompatible types
	abc. (8): warning: end of
y = 3	name 'bar' does not match
s1 = 3	program name 'abc'
s1 = arg2	abc. (3): warning: variable
end bar	's1' set but not used
	abc. (2): warning: variable
	'arg1' unused

If you also want TLC to identify and isolate non-fatal errors in your program, you can run TLC with any combination of five options by entering those options on the command line.

Test Coverage

TLC guarantees comprehensive test coverage of your program. Here are some of the checks it makes:

- It searches for errors in and issues warnings about TL/I constructs of dubious value.
- It checks for the proper use of built-in TL/I functions.
- It monitors return statements to check that functions and programs do not return more than one type of value.
- It verifies that functions and programs which return a value do not "fall off the end" without returning a value.
- It analyzes control flow to verify that statements are reachable.
- It tests for non-fatal errors, including:

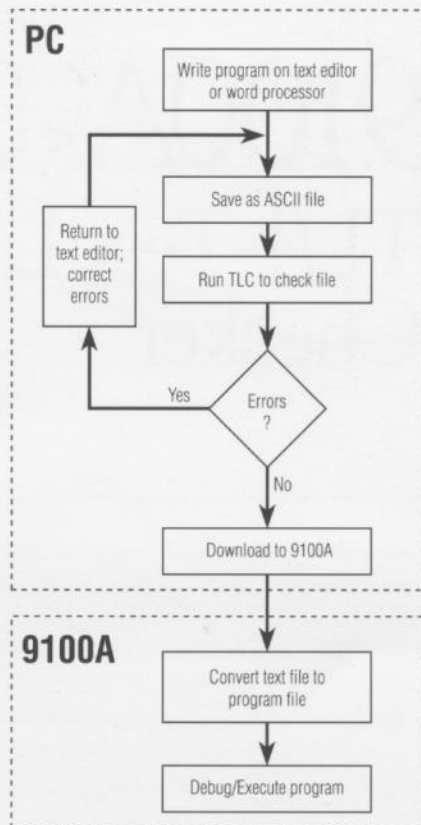
Undeclared formal parameters to programs, functions, exercisers, or handlers

Variables declared implicitly by assigning values to them

Uninitialized global variables

Variables that were not assigned a value before being referenced.

Unused global variables



Ordering Information

Model

9100A-020 9100A Test Language Checker

Contents

One 5-1/4" and one 3-1/2" disk
User's manual
Y1709 Null Modem Cable

System Requirements

IBM PC, PC-XT[®], PC-AT[™], or compatible with 512 KByte memory
Hard Disk with 1 MByte free memory
MS-DOS 3.0 or later

John Fluke Mfg. Co., Inc.

P.O. Box 9090, Everett, WA 98206
Tel. (206) 347-6100

For more information call:
(800) 443-5853 (toll-free) in the U.S.A.
(416) 890-7600 in Canada.
(206) 356-5500 from other countries.

Philips International B.V.

T&M Dept., Building TQIII-4
5600 MD Eindhoven, The Netherlands
Telex: 35000 PHTC NL/NLFEVSI

©Copyright 1990 John Fluke Mfg. Co., Inc. All rights reserved.
Specifications subject to change without notice.
IBM and PC AT are registered trademarks and PC/XT is a trademark of International Business Machines, Inc.
Printed in U.S.A. A0423A-02U9010/SE EN 9498 752 15411

FLUKE[®]