MEMTEST.MAC

A Command Language Macro Application Note

OVERVIEW

SourcePoint's powerful command language is extremely useful for automating tasks. It uses an interpreted scripting language that is very similar to the common C programming language. MemTest.MAC is an example of a SourcePoint™ command language macro. Its purpose is to test a user definable 64K segment of target memory using various data patterns.

THEORY OF OPERATION

This macro contains a procedure called mtest( ) that accepts two optional parameters that specify the segment to be tested and the number of test iterations to perform on the specified segment.

The test performs a series of memory pattern fills and subsequent verifies to test a segment of memory. The patterns include 00000000h, ffffffffh, 5a5a5a5ah, a5a5a5a5h, and marching 1's. Progress and status of the memory test is shown in the command window as well as being logged to file called 'memtest.txt'. If more than five target memory failures are encountered, the test will terminate.

Note: On most target systems, memory cannot be accessed immediately after the target is reset. Typically, BIOS or other firmware will need to initialize the target memory controller before target memory can be accessed or tested.

The macro is loaded from within SourcePoint by clicking on: **File|Macro|Load Macro**

It is then invoked from the command window by entering the following at the command prompt:

mtest(Segment, Passes)<cr>

Where:

Segment is optional and specifies the segment to be tested (default = 0000h)
Passes is optional and specifies the number to times to test the segment (default = 1)