

Introduction:

There have been numerous requests from our customers to reduce the test time of the ZVTEST application. The current application can take over 20 seconds of test time. Unfortunately, since most of the test time is in the chip specific Zoomed Video test module, it is difficult to reduce the test time significantly. However, as with the PCT450 and TESTCB software there are some delays that can be reduced. The ZVTEST test program incorporates some software delays to insure that the software will work with a wide variety of host socket controllers and host systems. However, in most cases many of these delays are unnecessary. Beginning with version 1.09 of the ZVTEST application the user will be given the option to reduce certain delays through command line switches.

Options Switch:

Beginning with release 1.09 of the ZVTEST software, a new command line switch allows the user to modify certain internal parameters. Future versions of software may have additional options to control certain parameters. The syntax of the new switch is as follows:

-mX:Y

With "-m" as the command, followed by a one or two-digit parameter number "XX" and an integer parameter "Y". The -mX:Y parameter can be placed anywhere on the command line after the ZVTEST command. Several -mX:Y parameters may appear on the same command line.

Parameter Description:

- m0:1** Enables test timer. Will printout the number of seconds that the PCT450 program takes to test a socket.
- m3:x** Specifies the delay between when the Host controller chip is initialized and the when the command to apply power is sent to the chip. The default value is approximately 2 seconds. However, in most cases this can be reduced to 0.
- m4:x** Specifies the delay between the power-on command to the chip and when the PCCtest card starts to be accessed. The default delay is approximately 2 seconds for TI and Ricoh controllers and 2.55 seconds for O2 controllers. In many cases this can be reduced to less than 1 second.

Example:

The following examples shows the possible test time improvement for a TI PCI1131 chip with a Silicon Motion SM721 chip with the specified delay times:

Test 1 Normal operation with time display - 17.86 seconds

`ZVTEST -b63 -v -0 -m0:1`

Test 2 Reducing the power-on delays - 15.00 seconds

`ZVTEST -b63 -v -0 -m0:1 -m3:2 -m4:17`

Reducing the Test Time of the VGA Chip Test Modules

It is beyond the scope of this document to suggest ways to reduce the test time of the VGA chip test modules. Each module was developed for a specific Zoomed Video implementation. In most cases, the software was developed by the VGA chip vendor and passed on to Sycard Technology for inclusion in the ZVTEST software package. Sycard can supply source code for many of the test modules, however, we cannot suggest ways to speed up the code. Contact the VGA chip vendor for this type of assistance.