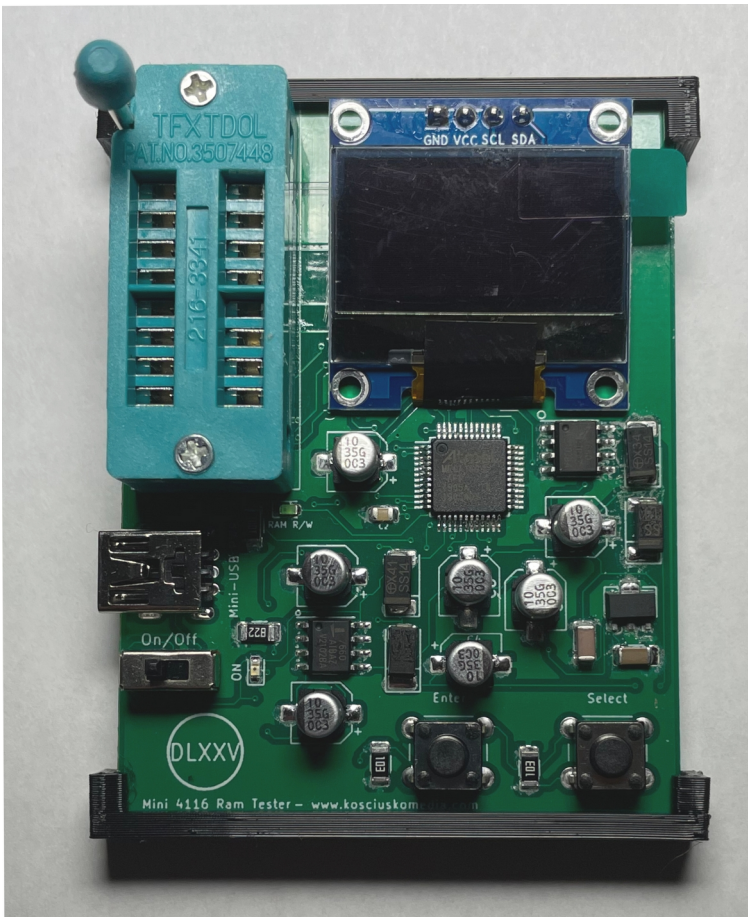


# The Mini 4116 RAM Tester Manual

Thank you for your interest in The Mini 4116 Ram Tester. This tester will check your 4116 DRAM chips and tell you whether they are good or bad. You can also use it to test the 4164 DRAM chip so long as you make the necessary modifications to the chip (This is normally done to use a 4164 chip instead of a 4116). To modify the 4164 chip you simply need to bend pin 1 and 8 upwards so they no longer go into the socket's connectors and connect Pin 8 and 9 with one another with a short piece of wire. Then it will be able to be tested just like the 4116, just as if you were replacing a 4116 with a 4164 in your machine.

## Using the tester:



At the top is the ZIF 16 pin socket and the OLED display. Under the ZIF socket there is a female mini-usb socket. This is used to power the unit. It requires 5V so you can use any usb power source that is 5V. Below the usb port is an on/off switch. This allows you to turn the unit off and on while leaving it plugged into the power source.

When you first turn on the tester you will see the KM logo for a few seconds. You will then be presented with a start screen that gives you two options. Normal and Stress test. Push the select button to choose between the two options and then push the enter button.

Read on for testing options.

## Normal Test

The normal test will go through each individual bit row by row and column by column testing each bit. It will first read and write the bit 0 at each ram address and then read it back. It will then write the bit 1 at each address. It will do this for 0 and 1 two times each for redundancy. If at any time in the process it fails to read back the appropriate bit the test will fail. The test is quite accurate but as nothing is perfect, you should always test a second time just to make sure. If it fails again, you can be fairly certain that either you don't have the ram properly seated or it is a bad chip.

On average this test takes 14 seconds to complete. When it is finished you will be notified that the RAM was good and how long the test took. You can then do another test.

### **Stress Test**

The stress test does the exact same thing as the normal test and it will stop if there is an error. However, it will not stop if the test was successful. Instead it will continue testing until you press the enter button. This is an added feature that some people have been interested in having to see whether their RAM chips are getting hot and failing after certain periods of time. Because the ZIF socket does not allow for easily placed temperature reading, you will have to use your sense of touch to see if the chip is hot. And of course, you can let it go until it fails. If it ever does. A good RAM chip should continue to function during the stress test for hours without issues.

Questions or comments?

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