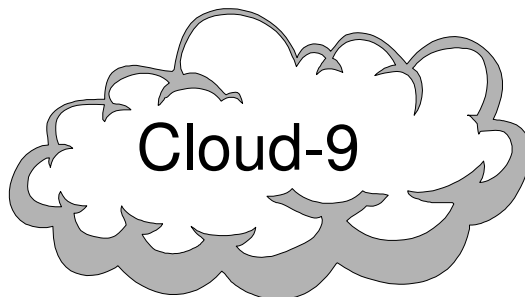
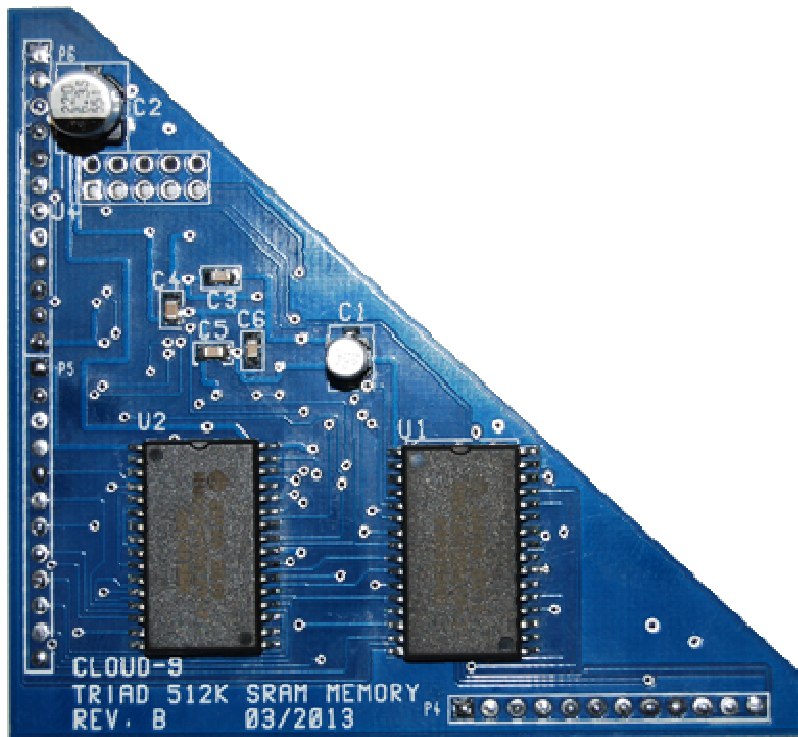


# TRIAD 512K SRAM Upgrade

## User's Manual



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# 1. Congratulations!

Thank you for purchasing the **TRIAD 512K SRAM Upgrade**, another one of the fine products offered by Cloud-9. This product was designed to be used with the Tandy Color Computer 3 exclusively.

Literally this is a 'COOL' upgrade. The following comparison data was collected during testing and benchmarked to our own 512K SIMM Upgrade board. The results are below:

Standard CoCo 3, 6809, running the MTEST512.BAS from Cloud-9

Meter : Fluke 87 True RMS Meter

Temperature Probe: ES EST-67 IR non contact

Ambient Temperature 78 ° F

<b>Test Data</b>	<b>TRIAD 512K data</b>		<b>Cloud-9 512K SIMM Upgrade</b>	
Memory Test Cycle Count	1040	~2 hrs	1040	~2 hrs
Memory chip temperature	87.4	° F	166.8	° F
Regulator Heat sink(base)	150.8	° F	171.6	° F
Average Current draw, CN6p2	21.82	mA	543	mA
Circuit Board area	4.898	sq. inches	9.72	sq. inches

## Comparison data

Memory Temperature reduction	-89.41%
Regulator Temperature reduction	-22.22%
Current reduction	-95.98%
Circuit Board area	-49.61%

Note: The TRIAD yields an 89.41% temperature reduction and a >95% reduction in power!!!!!!

The CoCo 3 has gone GREEN!!!

## **2. Installation**

The following is a step by step instruction guide on how to install your new **TRIAD 512K SRAM Memory** board into your system. Before you start, make sure that you have the AC power plug removed from the wall. If a multi-pack is present, make sure that the power is removed before removing it from the CoCo's cartridge port. Make sure that you have a static free area when performing this installation.

The **TRIAD 512K SRAM Upgrade** requires C65 and C66 to be clipped.

### **Required Tools**

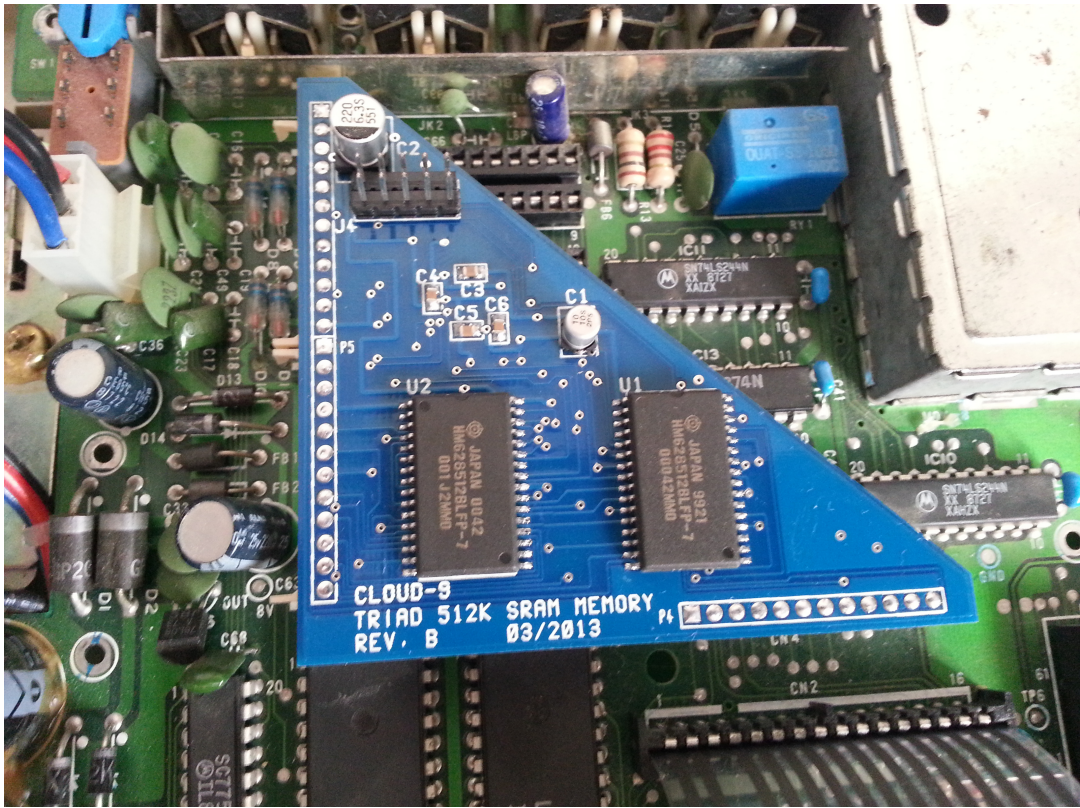
1. Phillips screwdriver
2. Lead cutter
3. Standard screwdriver or IC Puller

### **Inventory List**

1. Qty 1, TRIAD 512K SRAM Memory board assembly
2. Qty 1 512K Memory Test 5.25" disk
3. Qty 1, Manual

### **Procedure**

1. Remove all screws on the bottom of the computer. Note that the shorter screws are removed from the front of the computer by the keyboard.
2. Locate and remove four memory chips labeled IC16, IC17, IC18, IC19.
3. Locate and remove(cut) the small capacitor labeled C66 located just above the top memory chip IC18.
4. Locate and remove(cut) the small capacitor labeled C65 located just below the bottom memory chip IC17.
5. Insert the **TRIAD 512K SRAM Upgrade** board into the header sockets. J6 will be in alignment with CN6, J5 with CN5 and J4 with CN4.
6. Please refer to Figure 1. Installation should appear like this.
7. Close the cover and replace the screws that were removed in step #1. Watch the screw lengths; the longer case screw go to the rear.



**Figure 1**

## **3. Operation**

### **Software - Memory Test**

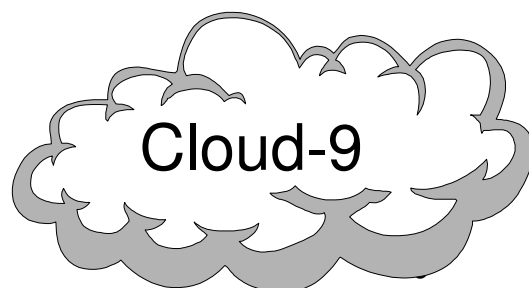
Enclosed is a utility that will test the memory. From Disk BASIC type the following command:

```
RUN"MTEST512" <ENTER>
```

This utility will check the memory blocks \$00-\$37. To exit this program, press any key and hold until exit. The program will loop until you press a key.

In the event that the memory should have to be replaced, please contact Cloud-9 via the email, [support@cloud9tech.com](mailto:support@cloud9tech.com).

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