

FB512

64KB (8x8KB)
cartridge for
Commodore 64/128
computers

Users Guide

Rev1A

Introduction

The FB512 cartridge is supplied with the features outlined in Figure 1 below.

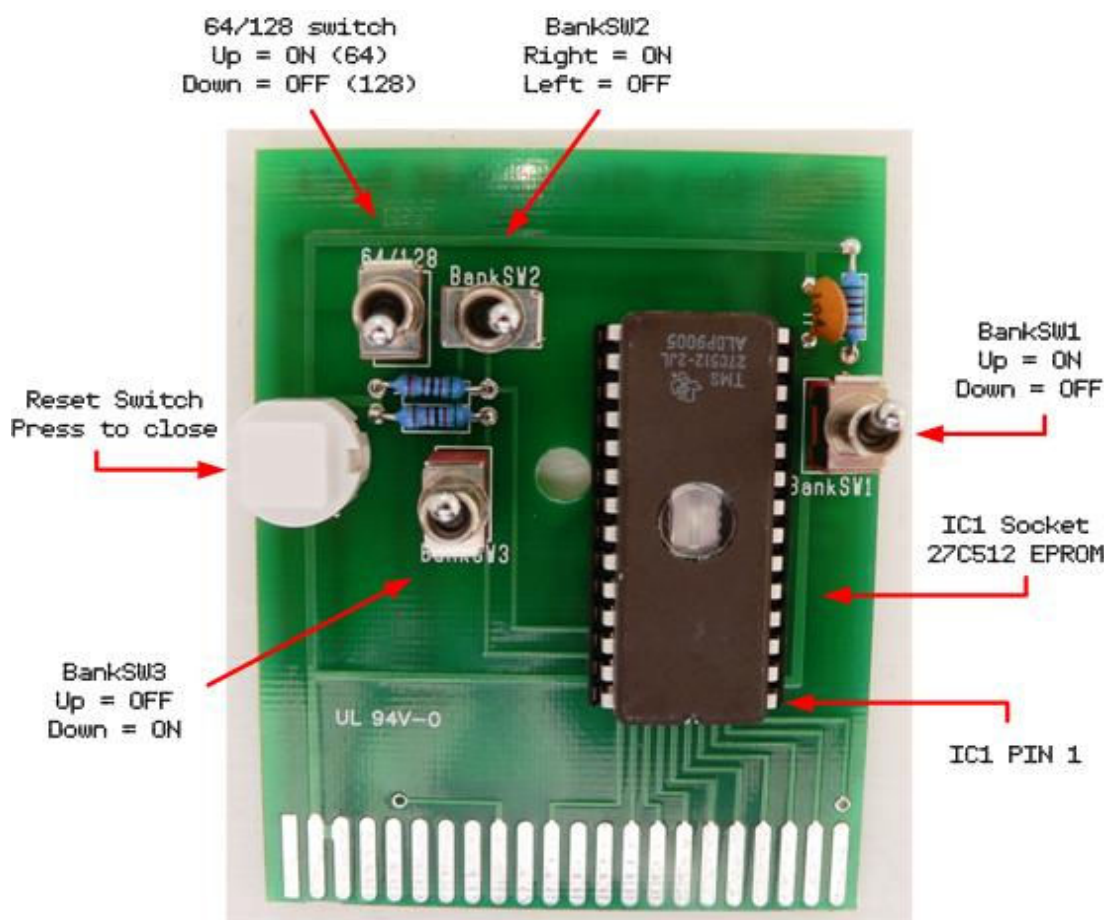


Figure 1: Top view of FB512 Cartridge

The FB512 is compatible with both Commodore 64 and Commodore 128 computers. It's designed to support 64KB 27512 series EPROMs. These EPROMs can store the equivalent of eight generic 8KB Commodore cartridges on one chip.

Any EPROMs supplied with the FB512 are blank and need to be programmed using an EPROM burner (not supplied). Please ensure that the EPROM burner used is able to support 27512 series EPROMs. Other size EPROMs like 2764, 27128 and 27256 are NOT supported by the FB512.

Bank Switches

Even though a 27512 series EPROM is capable of storing up to eight 8KB generic Commodore cartridge images, only one of these can be selected and active at any one time. Three mini-toggle switches are used to select which 8KB area of memory will be active and mapped to the default cartridge address of \$8000.

Bank SW1	Bank SW2	Bank SW3	27C512 8K Bank
ON	ON	ON	First
ON	OFF	ON	Second
ON	ON	OFF	Third
ON	OFF	OFF	Fourth
OFF	ON	ON	Fifth
OFF	OFF	ON	Sixth
OFF	ON	OFF	Seventh
OFF	OFF	OFF	Eighth

Table 1: Bank switching for 27512 series EPROM

DO NOT change the toggle switch settings when the Commodore computer is powered on. Always turn the computer OFF before selecting the required memory bank.

64/128 Switch

The FB512 has been designed so that it's compatible with both Commodore 64 and Commodore 128 computers. When used with the C128, a mini-toggle switch is used to select the mode of operation.

When the 64/128 switch is Closed, the ⁻⁻⁻⁻⁻EXROM pin on the Commodore cartridge port is grounded causing the C128 to revert to C64 mode on power up or after a system reset.

Commodore 64 cartridge ROM images will not work when used on a Commodore 128 in native C128 mode.

Reset Switch

The FB512 cartridge includes a reset switch. A hard reset of the computer is performed by depressing the button on this switch. This is similar to power cycling the computer.

Installation and Setup

The FB512 cartridge board comes fully assembled and ready for connection to your computer.

1. Turn your computer off before installing the FB512 into your computer's cartridge port. To avoid damaging your Commodore computer, DO NOT insert cartridges when the computer power is on.
2. Place your programmed 27C512 EPROM into socket IC1 of the FB512. Please note the correct orientation and location of pin number 1 marked with a white asterix * on the printed circuit board. The location of pin 1 is also highlighted in Figure 1 of this guide.
3. Plug the FB512 cartridge into the cartridge slot. Ensure that the FB512 cartridge is fully inserted into the Commodore expansion port with the top side being upright as shown in figure 1.

Troubleshooting

If there's no display or a blank black screen when powering on the Commodore computer with the FB512 cartridge installed, please check the following:

1. Was the FB512 cartridge inserted correctly into the Commodore expansion port? Turn the computer off. Reinsert the FB512 cartridge as per the instructions included in the Installation and Setup section of this User Guide.
2. Check that the Bank Switches SW1, SW2 and SW3 are in the correct position.
3. Is there a valid Commodore ROM image file programmed at that section of memory on the 27C512 EPROM?
4. Check that the cartridge ROM image file used is a generic 8KB format. Use an emulator like VICE to attach your 8KB Commodore ROM file as a Generic 8KB cartridge image. If the ROM image fails to work in VICE, it will not operate on the FB512.

Many thanks for purchasing this product. Enjoy!