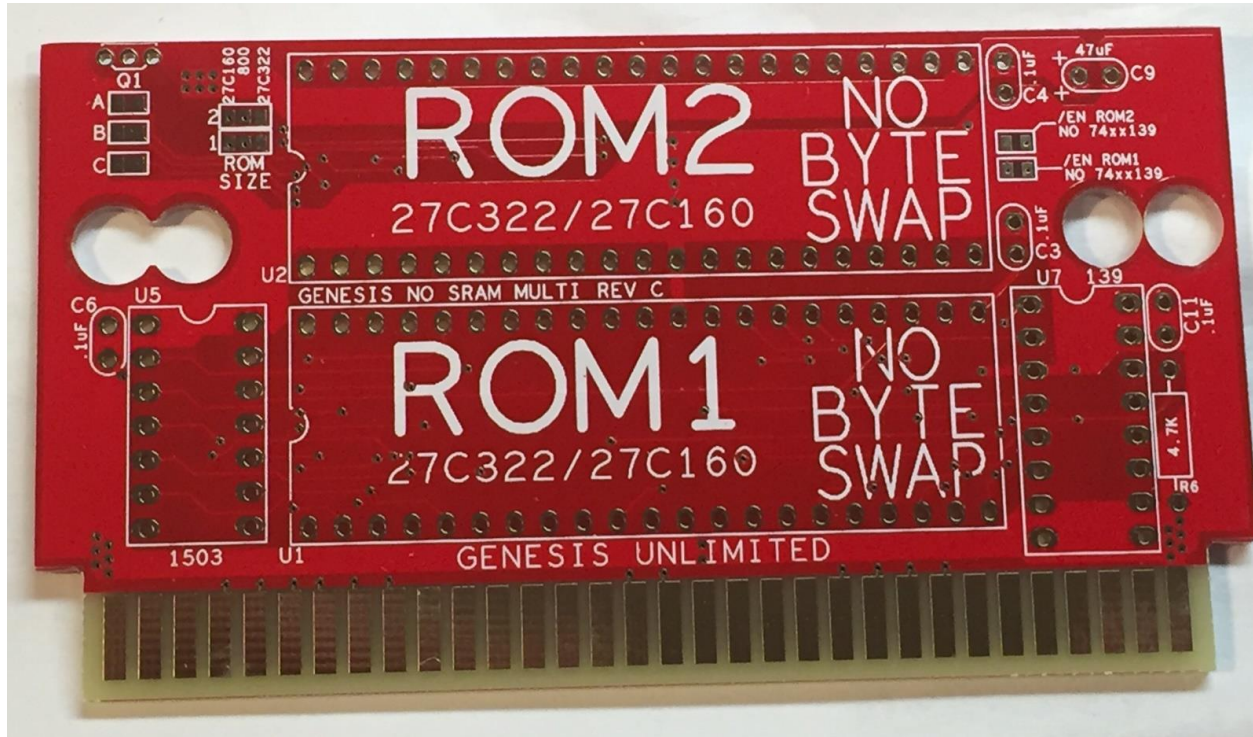


The Genesis no sram Multi pcb.



This pcb **does not** require you to **byte swap** your rom files.

This pcb will fit and work in Genesis and Sega 32x

This pcb can be for a single game or with additional parts, can be a multi game.

For a single game, only 2 parts are required.

This PCB can use 27c400, 27c800, 27c160, 27c322 eproms.

Here is a video showing the features of this pcb.

<https://youtu.be/8gD8E6AHlk0>

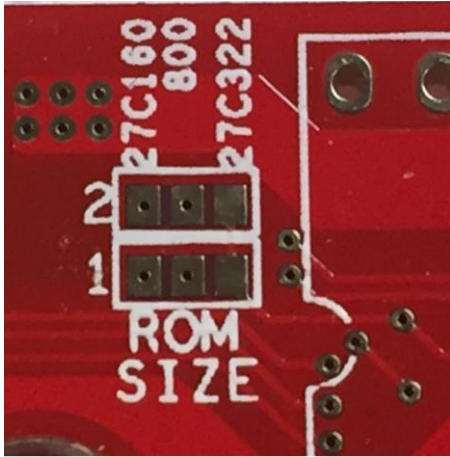
I will divide this instruction manual into 2 sections.

1. Single game builds
2. Multi game builds

Single Game builds:

Making a single game with this pcb is pretty easy.

Burn your rom file and jumper the appropriate **rom size jumper**. Remember to **NOT BYTE SWAP** the rom file.



Next, add the 2 capacitors C9 and C3 (Blue arrows)

The 2 blue arrows are the only parts need for a sinlge game build.

A multi-game build will include these parts

These jumper pads are for 2 purposes:
Single game rom enable or
Multi-Game in a **SINGLE ROM** enable.

DO NOT use these jumpers when making
a double rom multi-game. U7 is for
switching between 2 roms multi.

(YELLOW ARROW) Jumper the /EN ROM1 pads.

Solder in your rom.

You're done.

Multi Game builds:

Multi-Games can be in either 1 or 2 roms.

Multi-Games in 1 ROM:

Parts needed:

1 custom programmed micro controller

Magnet sensor and Magnet

The capacitors mentioned above + 2 more.

1. Same instructions as above for SINGLE GAME BUILD.

a. Solder jumper the “/EN ROM 1”

2. Mount the micro controller

3. Mount the magnet sensor off the edge of the board (PICTURE #)

4. Mount the caps C6,C3, C9

5. Mount the rom. **Set the ROM SIZE jumper.** ALL MULTI's will be 27c322 roms except for 1 pattern.

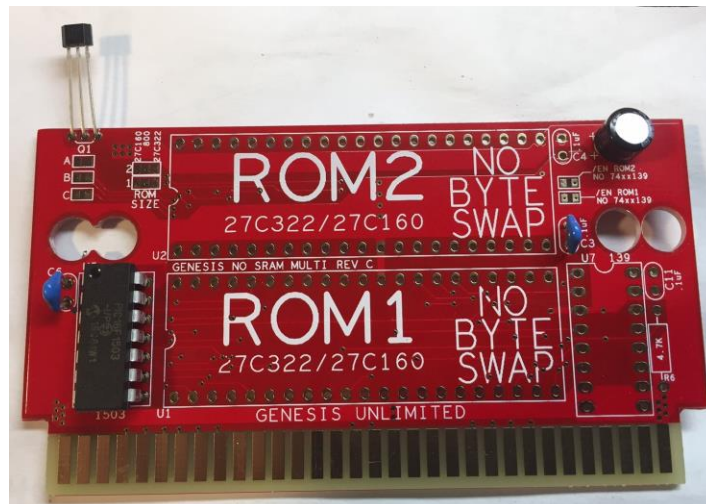
6. Very important! Cut these 2 traces on the back side:



7. Optional: mount the C45 surface mount capacitor on the back

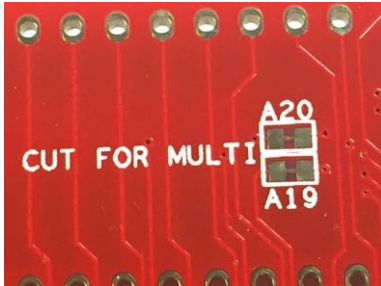
8. Set your CHART JUMPER for the multi game pattern (detailed below)

9. You're done!

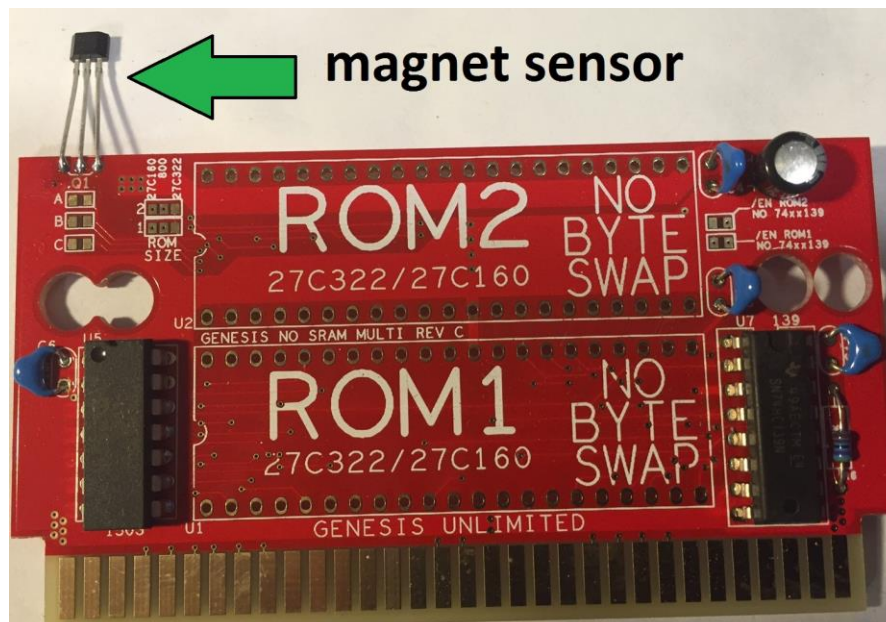


Multi-Games in 2 ROMs:

1. DO **NOT** jumper the “ /EN ROM 1” or “ /EN ROM 2”
2. Mount the micro controller
3. Mount the magnet sensor off the edge of the board (PICTURE #)
4. Mount the caps C6,C3, C9, C11, C4
5. Mount the 2 roms. Set the ROM SIZE jumper. ALL MULTI's using 2 roms will be 27c322.
6. Very important! Cut these 2 traces on the back side:



7. Optional: mount the C45 surface mount capacitor on the back
8. Mount U7 (74HC139)
9. Recommended: mount the R6 resistor 4.7k ohm.
10. Set your CHART JUMPER for the multi game pattern (detailed below)
11. You're done!



This is what a 2 ROM multi build would look like.

Parts needed for Single game:

C9

C3

Parts needed for Multi-Game in SINGLE ROM.

C9

C3, C6

U5 (micro controller)

Q1 sensor

C45 optional

Parts needed for Multi-Game in 2 ROMs.

C9

C3, C4, C6, C11

U5 (micro controller)

Q1 sensor

C45 optional

U7

R6 (recommended)

Chart settings:

All multi game charts are using 27c322 except for 1

A, B, or C (or combination thereof) jumpers is HOW the chart patterns are selected

Charts

16F1503			Hi/Lo mapper settings			Chart Settings			
			SRAM A15		SRAM A16				
RESET			3	2	1	C	B	A	
1 ROM	2 GAME MULTI 27C322	POWER ON	L	H	L	no chart settings (default)			
		CYCLE 1	L	L	H				
	4 GAME MULTI 27C322	POWER ON	L	H	L	A			
		CYCLE 1	L	L	H				
		CYCLE 2	H	L	L				
		CYCLE 3	H	L	H				
	2 GAME MULTI 27C160	POWER ON	L	H	L	B			
		CYCLE 1	L	L	H				
3 GAME MULTI 27C322	POWER ON	L	H	L	C				
	CYCLE 1	H	H	L					
	CYCLE 2	L	L	H					

ROMS	GAMES	SIZES
2mb	1 ROM	
2mb		
1mb		
1mb		
1mb		
1mb		
1mb		
1mb		
2mb		