Super Nintendo 50/60 Hz Switchless Mod + LED Mod

This guide shows you how to mod your super…

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INTRODUCTION

This guide shows you how to mod your super nintendo region free without a switch and with new LED lights.

btw. This mod doesn't work on 1 Chip SNES or SNES Mini.
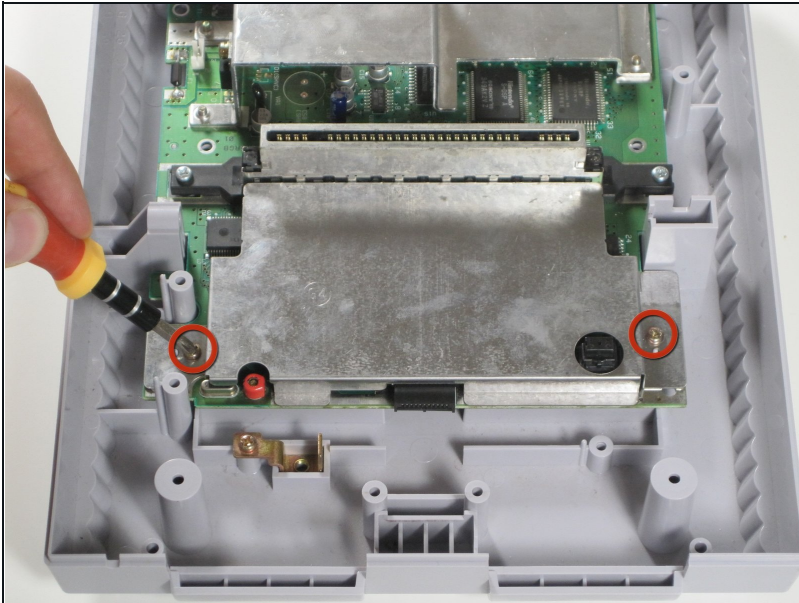
🔧 TOOLS:

Gamebit 4.5mm (1)
Phillips #2 Screwdriver (1)
Tweezers (1)
Double-Sided Tape (1)
Desoldering Pump (1)
Metal Spudger (1)
Universal Programmer (1)
Flush Cutter (1)
Soldering Iron (1)
Desoldering Braid (1)

⚙ PARTS:

Wire Wrapping Wire (1)
Heat Shrink Tubing Assortment (1)
Resistor 220 Ohm (1)
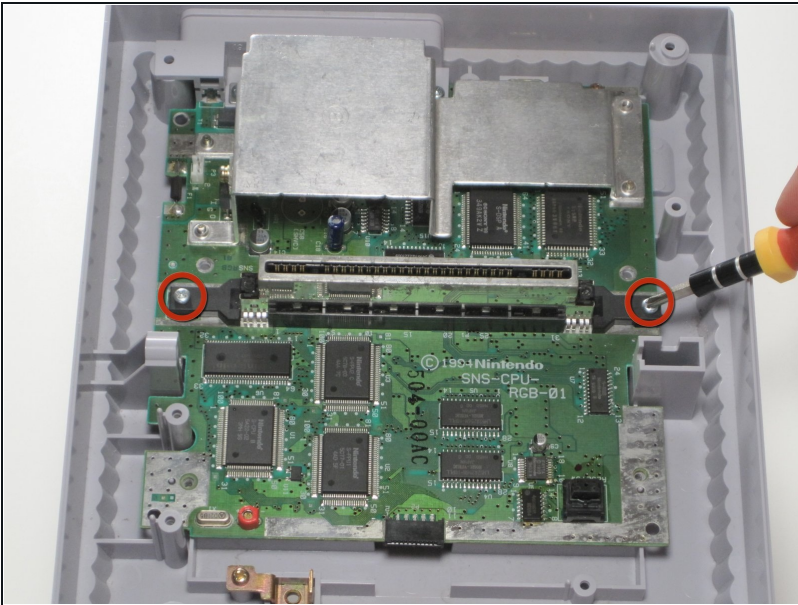5 mm Through-Hole 3Pin Led Light, Red-Green Dual Color (1)

Step 1 — Motherboard

- Remove the two Phillips two 11.6mm screws that connect the front shield to the motherboard.
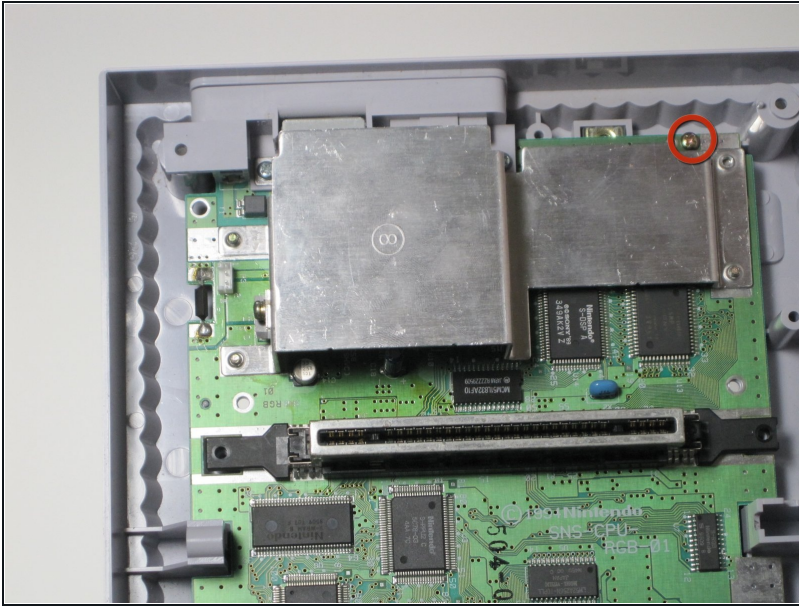
Step 2

- Lift the front shield straight up to remove it from the motherboard.
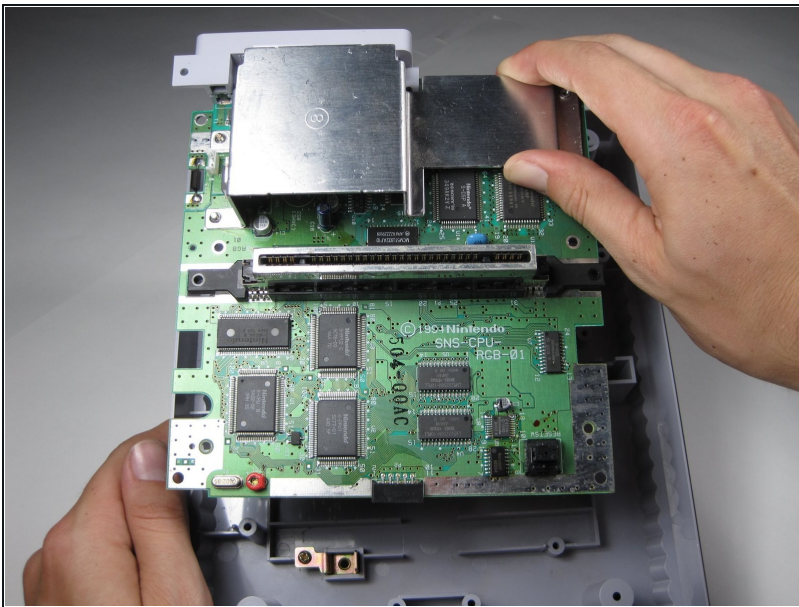
Step 3

- Remove the two silver 15.6 mm Phillips #2 screws on either side of the 62 pin connector.

Step 4

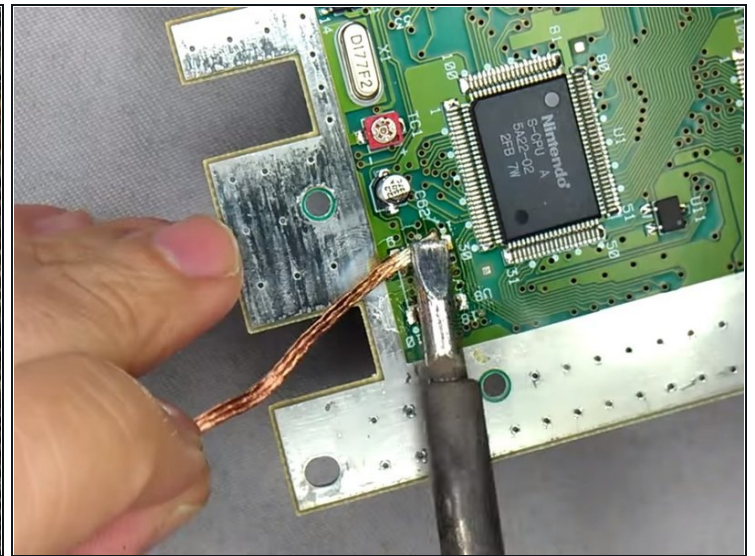- Remove the 11.8 mm Phillips #2 screw near the rear of the SNES.

Step 5

- Lift the motherboard straight up to remove it.

Step 6 — The Two Chips

- The Two Chips that you need on your Super Nintendo

- ⓘ This mod only works on original Super Nintendo with 2 Chips, this mod doesn't work on the 1 Chip Snes.
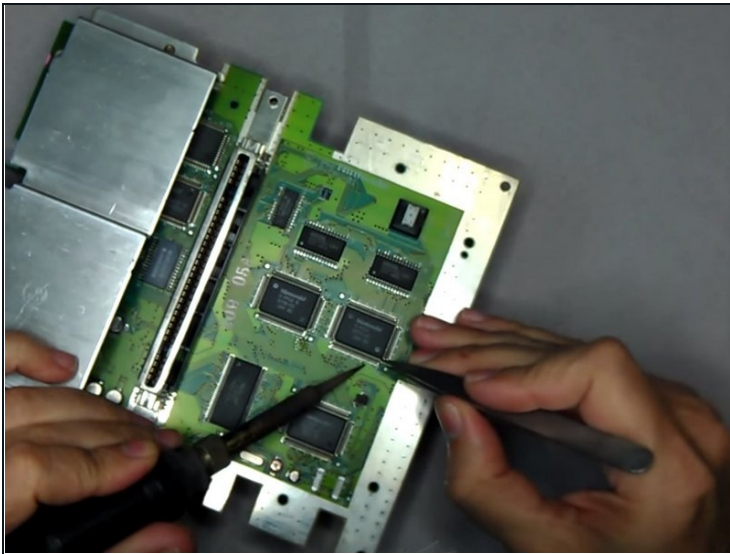
Step 7 — The Lockout Chip

- Remove the Lock Out chip (use the solder gun)

- ☑ After removing the lock out chip there will probably be leftover of solder where the chip used to be so try to remove the soldier as good as you can

- ⓘ To remove the solder leftover, you can use the soldering iron and solder wick.
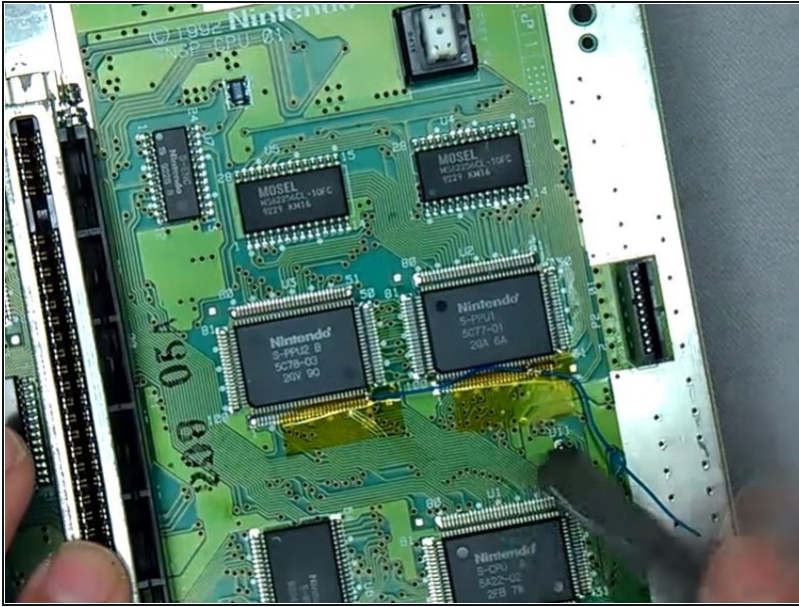
Step 8 — PPU 2
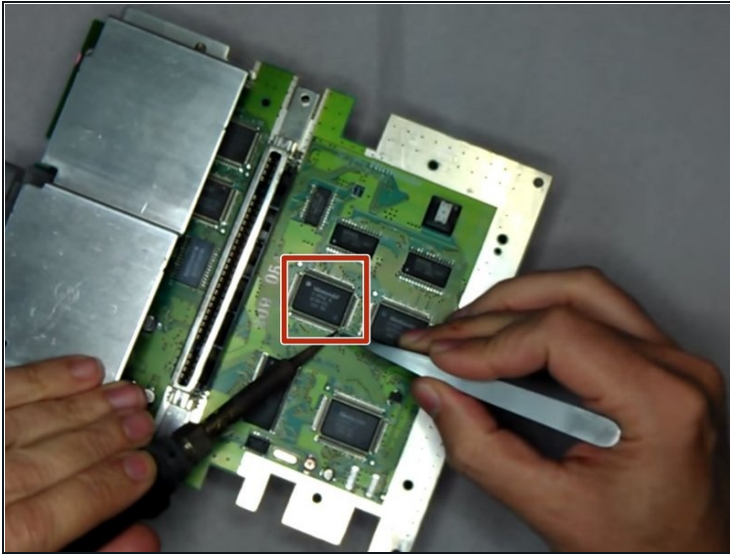
- Lift up the PPU2 Pin 30 from the Motherboard

Step 9 — PPU 1

- Now lift up Pin 24 on PPU 1

Step 10 — Wire Time

- Wire the lifted pins (PPU 2 Pin 30 & PPU1 Pin 24) together

- ⓘ You need to use a Soldering Iron to wire the pins together

- ⓘ You can also use tape to hold the wires down to the motherboard
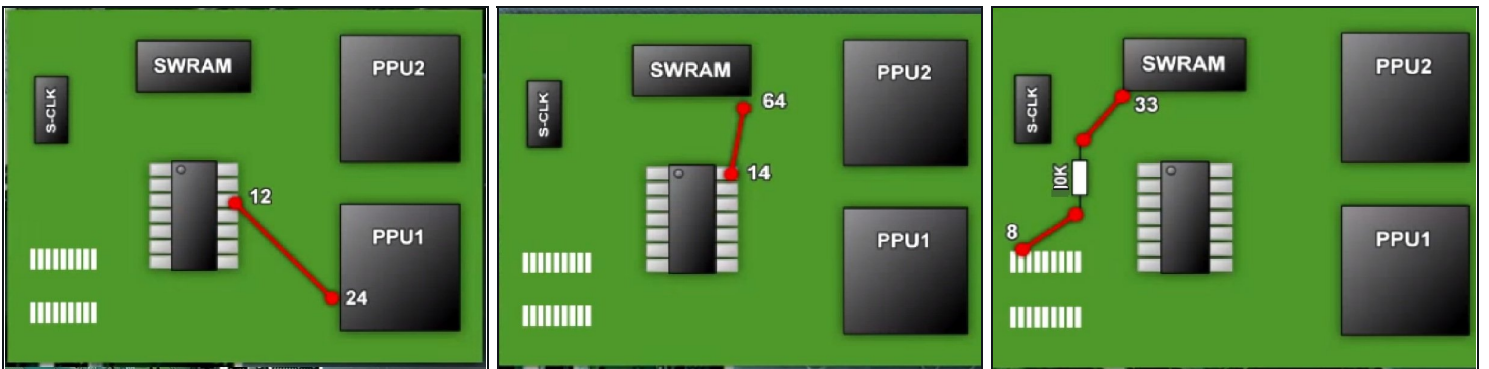
Step 11 — Program

- Now you have to put the PIC16F630 Chip into the programmer and Flash the chip with the Super CIC File.

- File can be downloaded here: http://sd2snes.de/files/supercic.zip

Step 12 — The Pins

- Bend the pins outwards

- Then clip the pins

- Use double sided tape and put it on top of the CPU and put the Super CIC on top of the double sided tape.
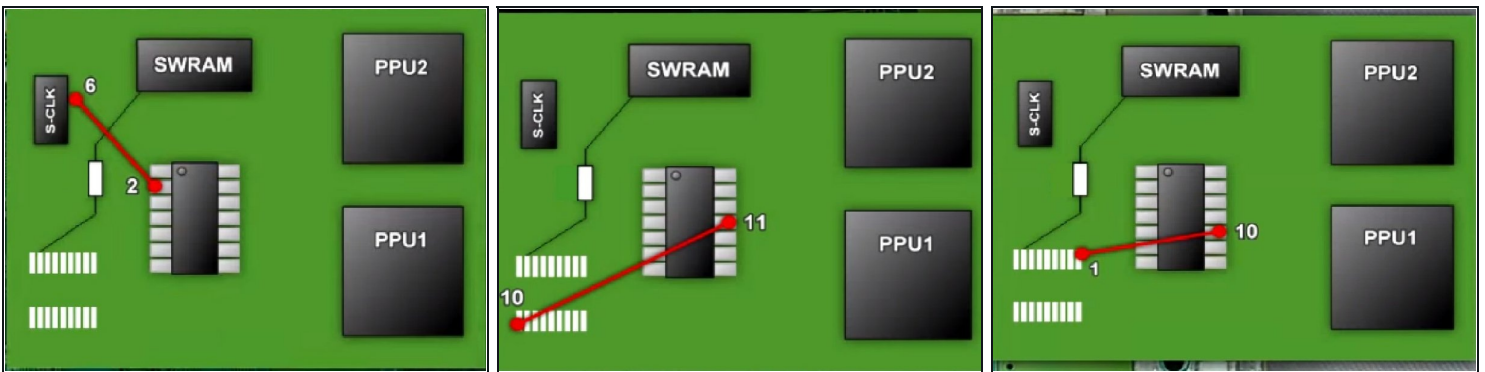
Step 13 — The Wires

- Pic 1: Solder a wire from Super CIC Pin 12 to PPU1 Pin 24

- Pic 2: Solder a wire from Super CIC Pin 14 to SWRAM Pin 64

- Pic 3: Solder the 10k Ohm Resistor to the pin 8 (where the old CIC used to be) and to SWRAM Pin 33
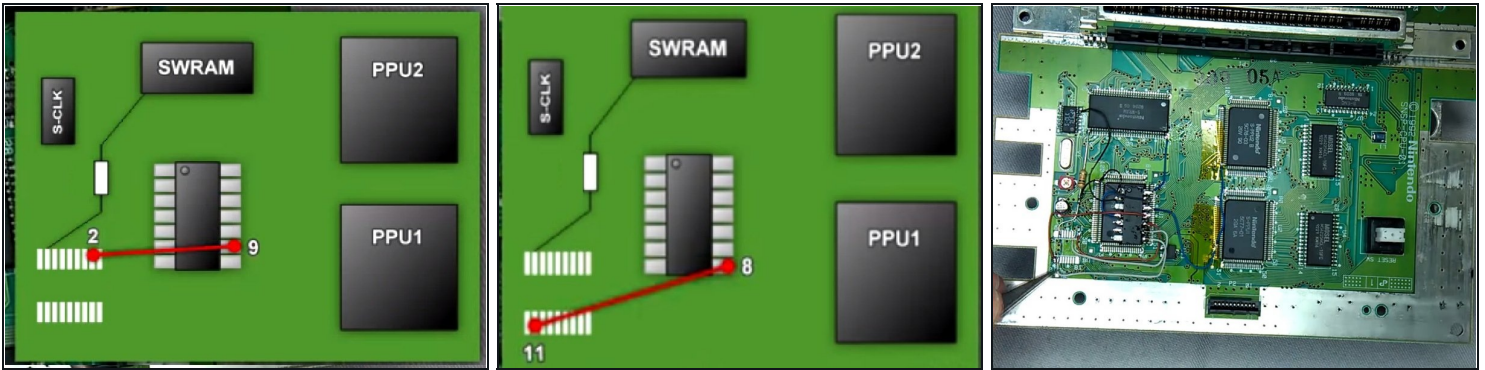
Step 14 — The Wires Part 2
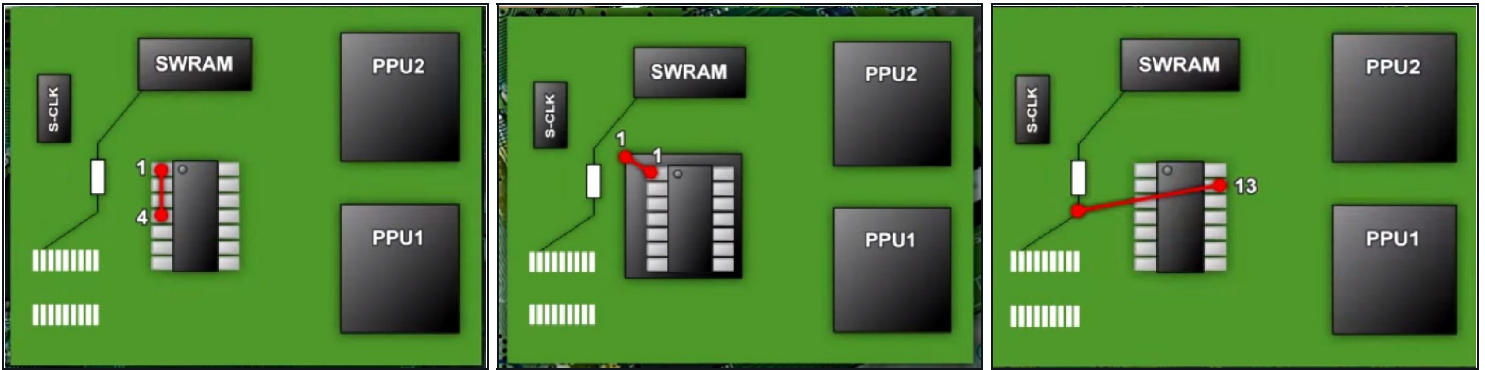
- Pic 1: Solder a Wire from Super CIC Pin 1 to 4 on the same chip.

- Pic 2: Solder a wire from Super CIC Pin 1 to the CPU Pin 1

- Pic 3: Solder a wire from Super CIC Pin 13 to the End Point of the Resistor

Step 15 — The Wires Part 3

- Pic 1: Sother a wire from Super CIC Pin 2 to S-CLK Pin 6

- Pic 2: Sother a wire from Super CIC Pin 11 to Old CIC Pin 10

- Pic 3: Sother a wire from Super CIC Pin 10 to Old CIC Pin 1

Step 16 — The Wires Part 4

- Pic 1: Solder a wire from Super CIC Pin 9 to Old CIC Pin 2

- Pic 2: Solder a wire from Super CIC Pin 8 to Old CIC Pin 11

- Pic 3: You've soldered most of the wires now, lets go to the LED Mod

Step 17 — The LED Mod
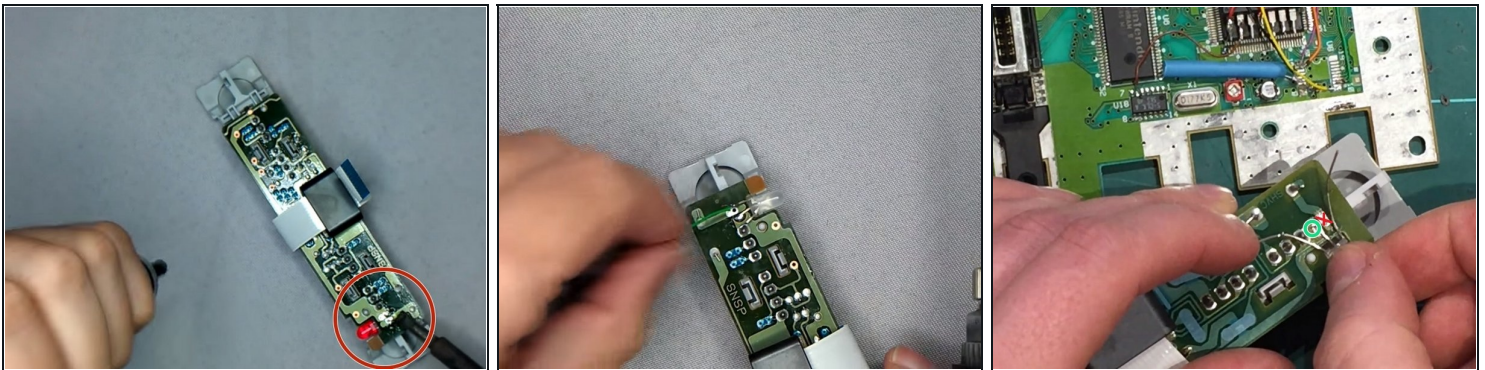
- Plug out the controller ports and solder out the LED Light.

- ⓘ When the solder points have been desoldered, you can use the [tweezers](#) to pull out the led light

- Sother on the new LED Light with the middle pin on the left solder hole

- ⚠ Do Not sother the middle pin on the LED Light to the right solder hole as it will then be stuck in only one color!

Step 18 — Led Resistors
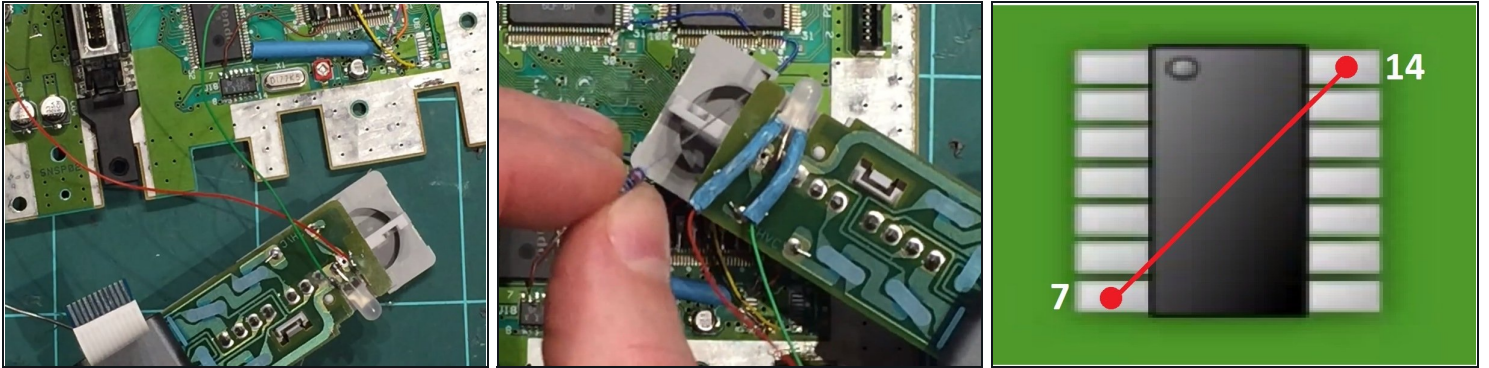
- Solder 2 wires on the left and right pins on the led light, green wire on the left pin and red wire on the right pin.

- After that you should put the wires into one heat shrink tube each, remember to heat the heat shrink tubes when its over the pins.

- Then you have to solder the 2k Resistor to the red wire and the 220 ohm Resistor to the green wire.

- Then the last thing you need to do is to solder a wire from Super CIC Pin 7 to Pin 14.

Step 19 — The End

- You're Now Done! You just need to put your Super Nintendo back together and then you have a Region Free Switchless Super Nintendo!

- Green Light (PAL)

- Red Light (NTSC) [For American and Japanese Games]

- Orange Light (Auto)

To reassemble your device, follow these instructions in reverse order.

These screenshots have been taken by 2 videoes, one from Global Garage and Chips y Bits on YouTube! I made this guide since its a little easier to read a guide with pictures like this instead of watching a 30 min video