

# Installation tutorial for Console Customs PS3

## Rapidfire Microchip for Sixaxis and Dualshock3 controllers

This tutorial is designed to aid you in installation of a console custom rapidfire microchip. There is no one way to install this chip but this method is what I have found works the best and allows the chip to fit inside the controller.

This installation requires soldering several wires to extremely small confined spaces. I do not advise attempting this installation if you are a beginner at soldering. I recommend reading through all of the instructions and understanding them before beginning your installation.

**Please proceed with this installation at your own risk. I will not be held responsible for any damage to yourself, your controller, your PS3 console or any other equipment.**

### Tools needed:

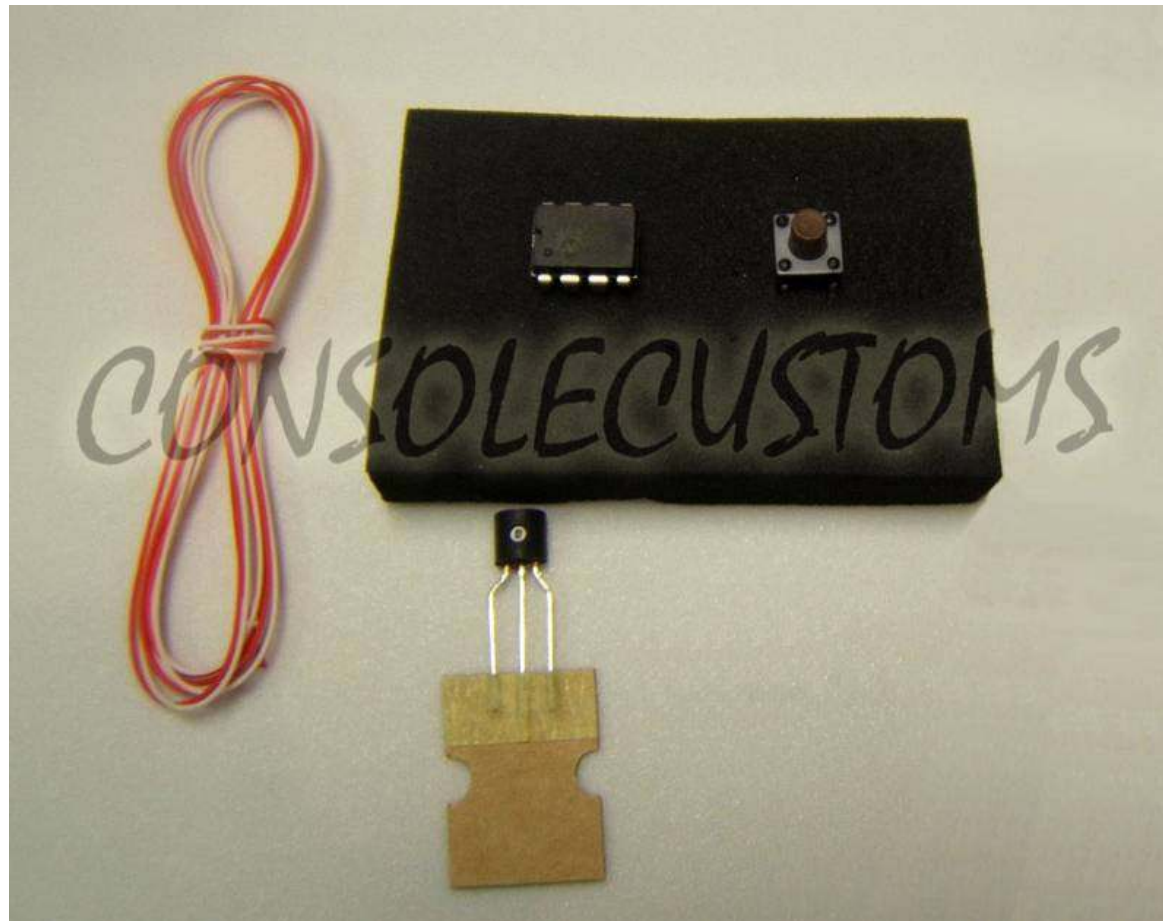
- Small Phillips head screwdriver
- Soldering iron (A15w/30w from Radio Shack about \$15)
- Solder (rosin core solder from Radio Shack works well so there is no need for flux)
- Wire strippers (that can strip 30g wire, a 30g wire wrap tool from Radio Shack includes a 30g stripper \$8)
  - Wire cutters
  - Hot glue gun
- 9/64<sup>th</sup> drill bit (or close to it, a 1/8<sup>th</sup> will work as well but the hole will be a little big)
  - Small pocket knife or razor blade (optional but helpful)

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Also visit our eBay store at <http://stores.ebay.com/console-customs>

## Step1:KitContents

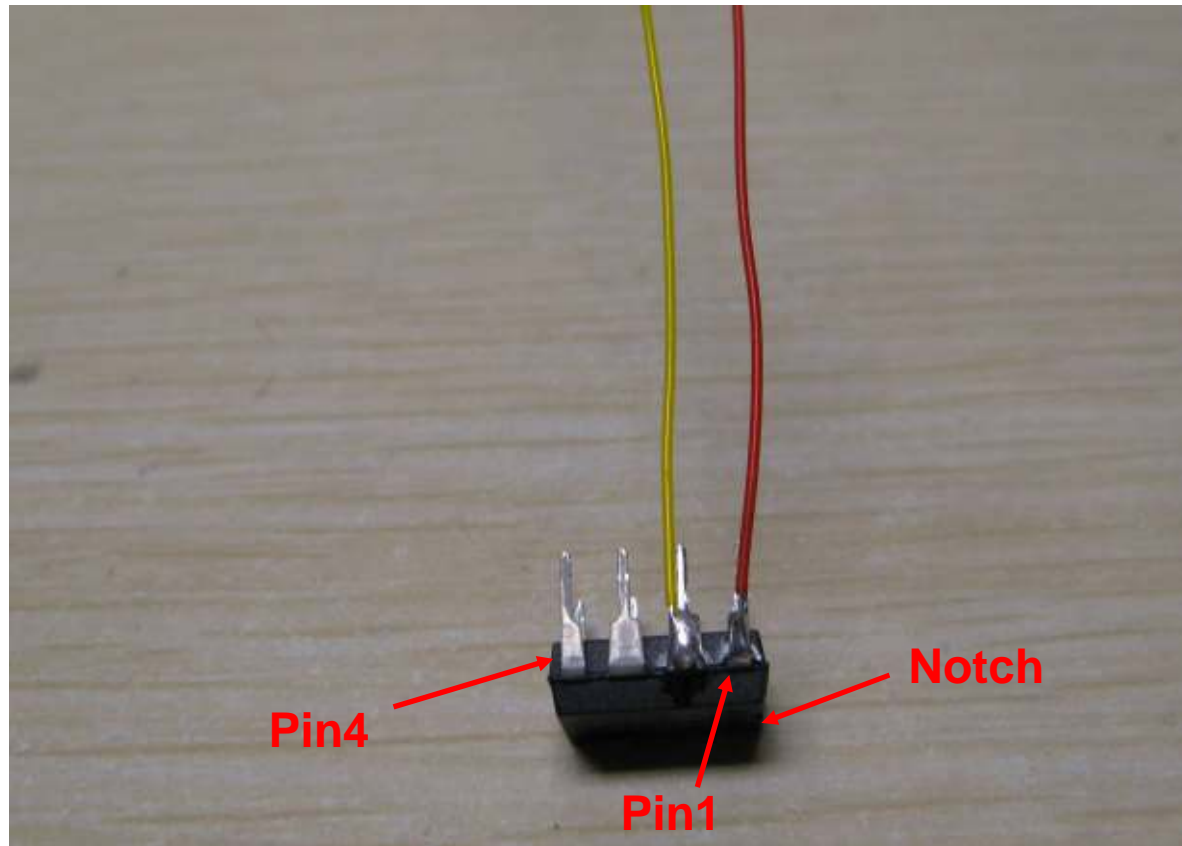
- You should have the following items in your kit
  - 1.(1)8pinPICmicrocontroller
  - 2.(1)NPNTransistor
  - 3.(1)tactileswitch
  - 4.Aprox.18"of2differentcolorsofwire



## Step 2: Soldering the Power and button wires to the chip.

- You will start by putting the chip on its back (a technique called deadbug) or on its side like we have done here. Note the location of the notch that is on top of the chip. Besure you orient the chip correctly or it will not work.
- Start by soldering a short piece of wire approximately 1.5 inches long to pin 1. This is the power wire and is the red wire in this picture.
- Next solder another wire to pin 2. This wire should be approximately 5 inches long. This is the yellow wire in the picture. This wire will go to the button that we will install later in the tutorial.

tip: For information on proper soldering visit [http://www.curiousinventor.com/guides/How To Solder](http://www.curiousinventor.com/guides/How_To_Solder)

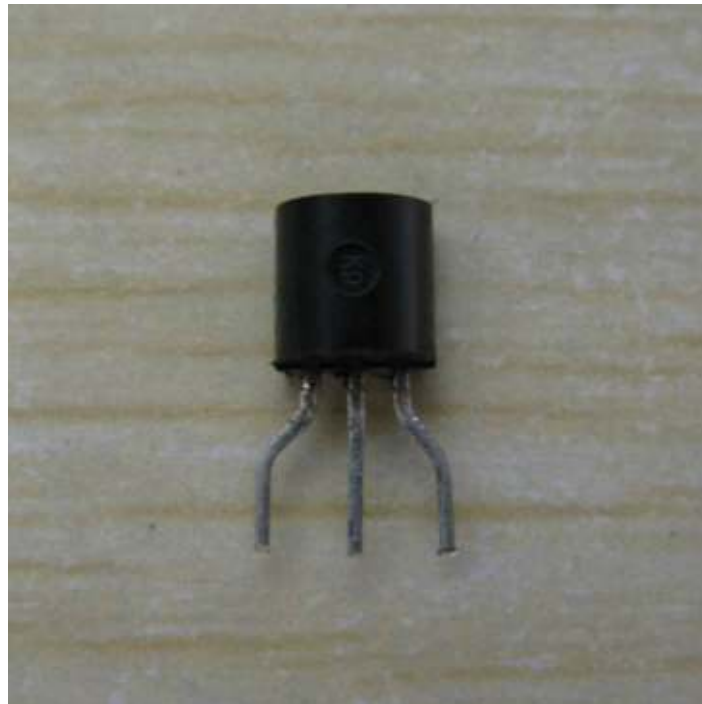


### Step3:preparingthetransistor.

- Youwillneedtoattachthetransistortooneleg ofthechip.Sowewillcutandbendthe legstomakethatprocesseasier.
- TheLeftimageshowsthetransistorasyouwillre ceiveit,inyourkit.
- Themiddleimageshowsthelegsoftransistorcut tothelengththeyshouldbe.This is approximately $\frac{1}{4}$ inch.
- Finallyyouwilltakeandbendtheoutsidetwoleg sovertheroundededgeofthetransistor

*tip:Forinformationonpropersolderingvisit*

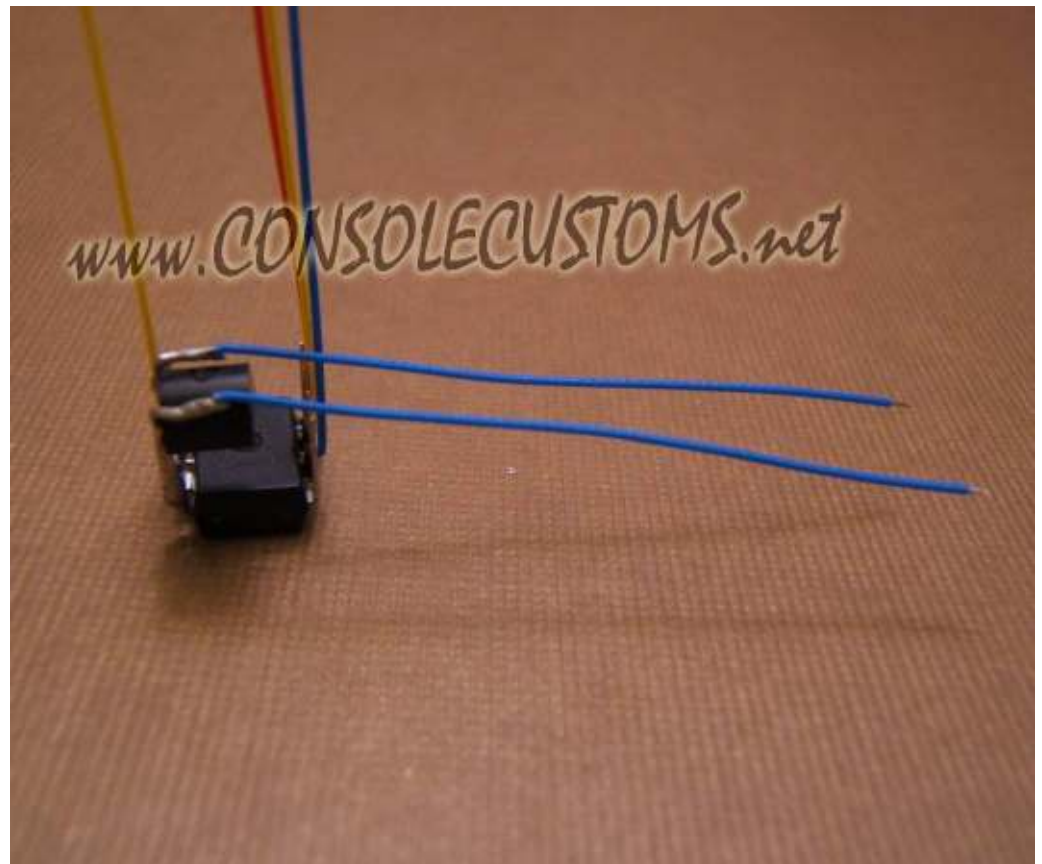
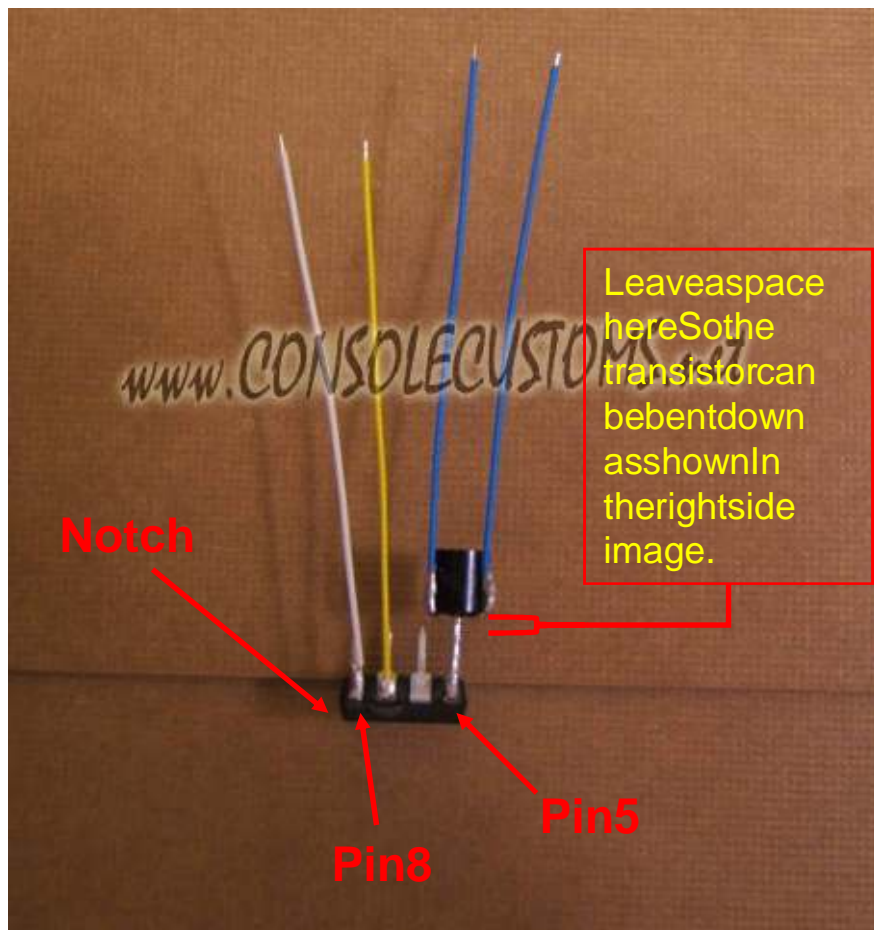
[http://www.curiousinventor.com/guides/How To Solder](http://www.curiousinventor.com/guides/How_To_Solder)



## Step 4: Soldering the transistor, ground wire, LED wire and R1 wire to the chip.

- Now take the transistor that you just prepared and solder it to pin number 5 of the chip. Make sure that the black part of the transistor sits higher than the top of the pins so it can be bent down.
- Solder a wire to each of the two pins you bent back on the transistor. Shown here in blue. These two wires should be approximately 1.5 inches and will go to the connections in the controller for R1 or R2.
- Next is Pin 7 (yellow wire in the image) which will go to the player 4 LED. This wire should be 1.5 inches long.
- Finally is pin 8 (white wire in the image) is the ground wire. This should also be 1.5 inches long.

*tip: For information on proper soldering visit [http://www.curiousinventor.com/guides/How To Solder](http://www.curiousinventor.com/guides/How_To_Solder)*



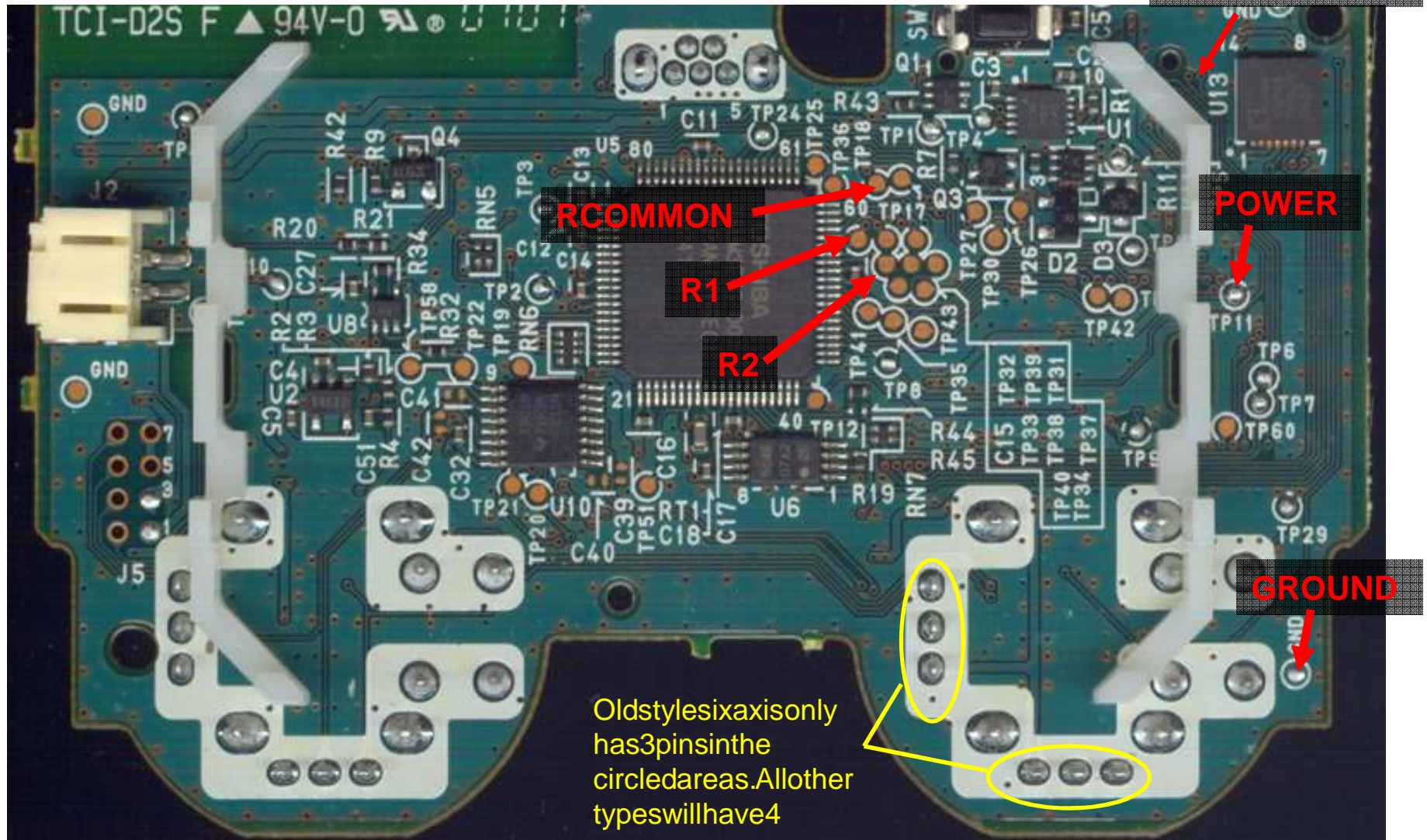
## Step 5: Opening the controller

- Remove the 5 screws indicated below.
- The controller also has a clip holding it together in the bottom. The left image shows approximately how the controller. You can usually squeeze the back cover of the controller together at the center top to pop off the back cover. But you may need to use a small knife or screwdriver to unlatch the clip.



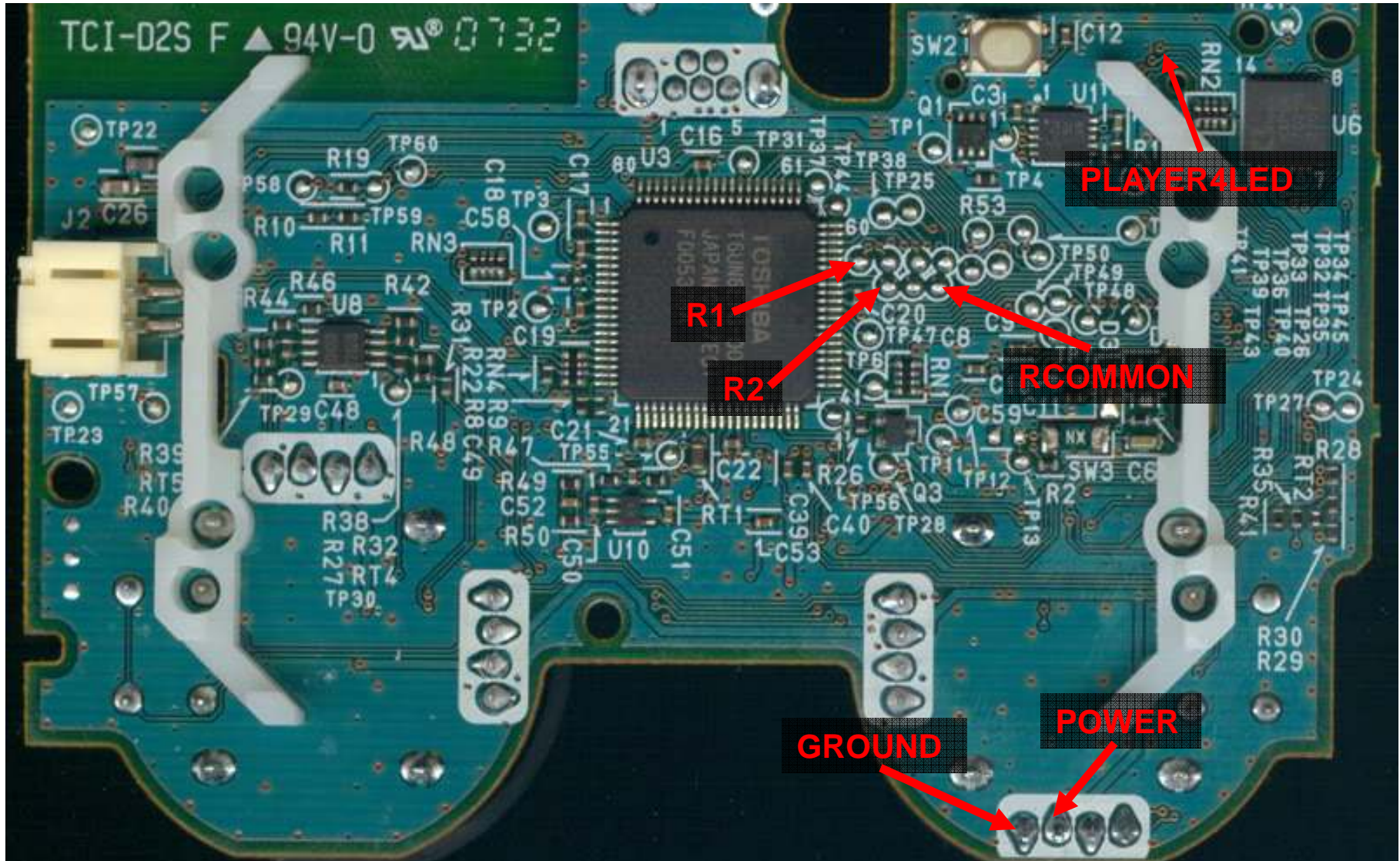
## Step6:Identifyingyourcontroller

- Currentlythereare2differenttypesofSixaxiscont  
findpicturesandsolderlocationsforeachtypeofcontro  
llers.Belowyouwill
- FirsttheOldstyleSixaxis– ThisiseasilyIdentifiedb  
3verticalandhorizontal solderconnectionsforthethu  
mbsticks(circledinYellow).
- ThePlayer4LEDIsaverysmallviajusttotheleft  
ofthe3intheverticalmarking“U13”onthePCB



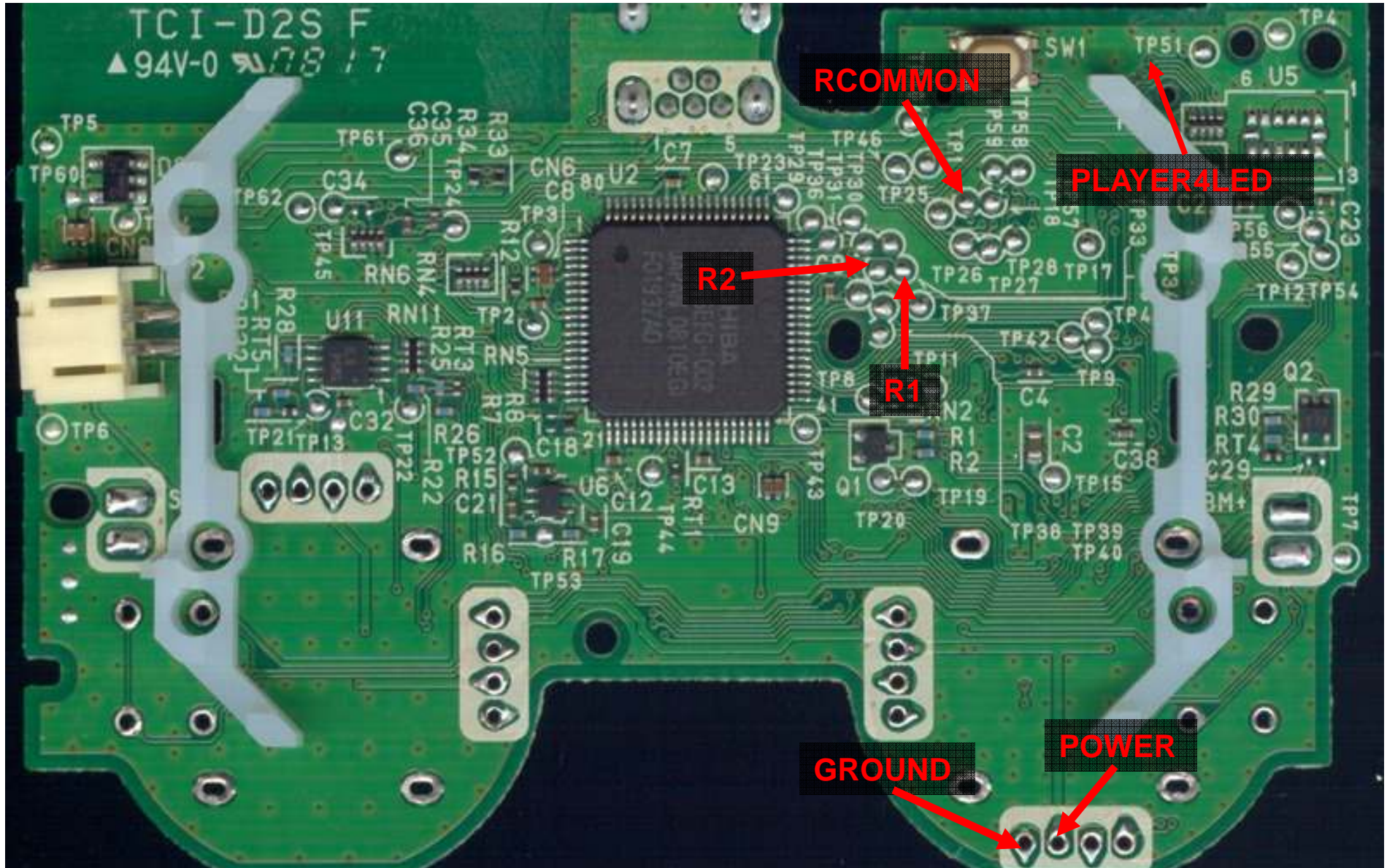
## Step6cont.:Identifyingyourcontroller

- NextisthenewstyleSixaxisand1<sup>st</sup> GenerationDualshock3.Theseareboththesamelayouta<sup>nd</sup>solderpoints.Theonly differenceisthedualshockhasrumblemotors.Someversion<sup>s</sup>ofthiscontrollerdonothavethesmallsquarechipth<sup>at</sup>isinthep<sup>er</sup>righ<sup>t</sup>cornerofthePCBinthispicturebutall solderpointsareinthesamelocation.
- Theplayer4LEDonthiscontrollerisaverysmallvi<sup>th</sup>athatisjusttothetoprigh<sup>t</sup>ofthewhiteplasticba<sup>tt</sup>teryholder.



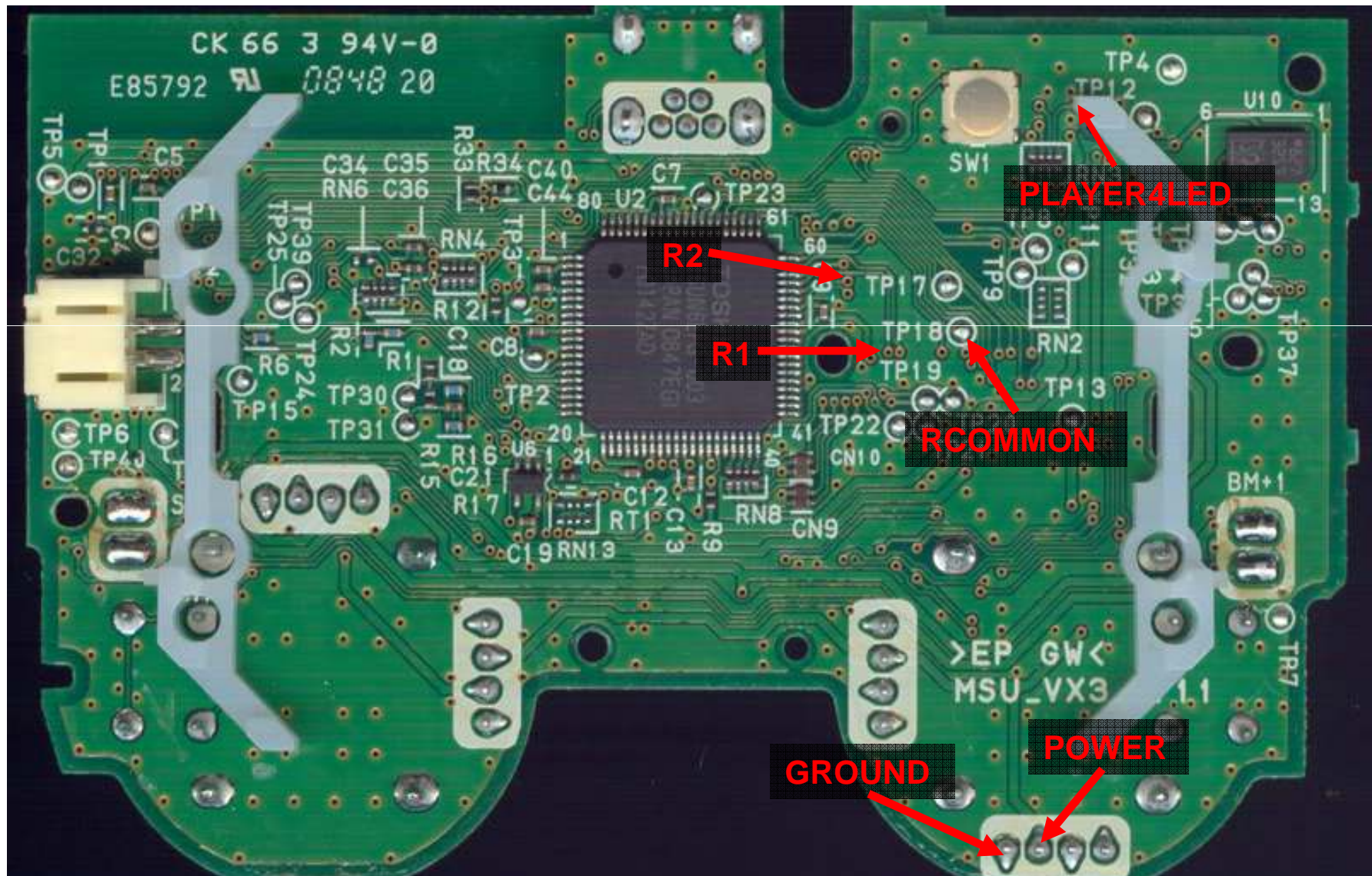
## Step6cont.:Identifyingyourcontroller

- Nextisthe2<sup>nd</sup> generationsdualshock.Paycloseattentiontothemarkings onthePCBsoyouaresuretofindthecorrectlayout foryourcontroller.
- Theplayer4LEDisaverysmallviajustundertheP in“TP51”thatiswrittenonthePCB.



## Step6cont.:Identifyingyourcontroller

- Finallyisthe3<sup>rd</sup> generationsdualshock.UnfortunatelySonydidnotleave usanylargesolderpadsfortheR1andR2solder pointsinthiscontroller.Sowewillbeusingthisasou rsamplefortherestoftheinstallationasitistheh ardesttoworkwith.
- Theplayer4LEDsolderpointisaverysmallviaon thisboardandiscoveredbythebatteryholderinthe picture,butitisjust underthe“T”in“TP12”that iswrittenonthePCB.

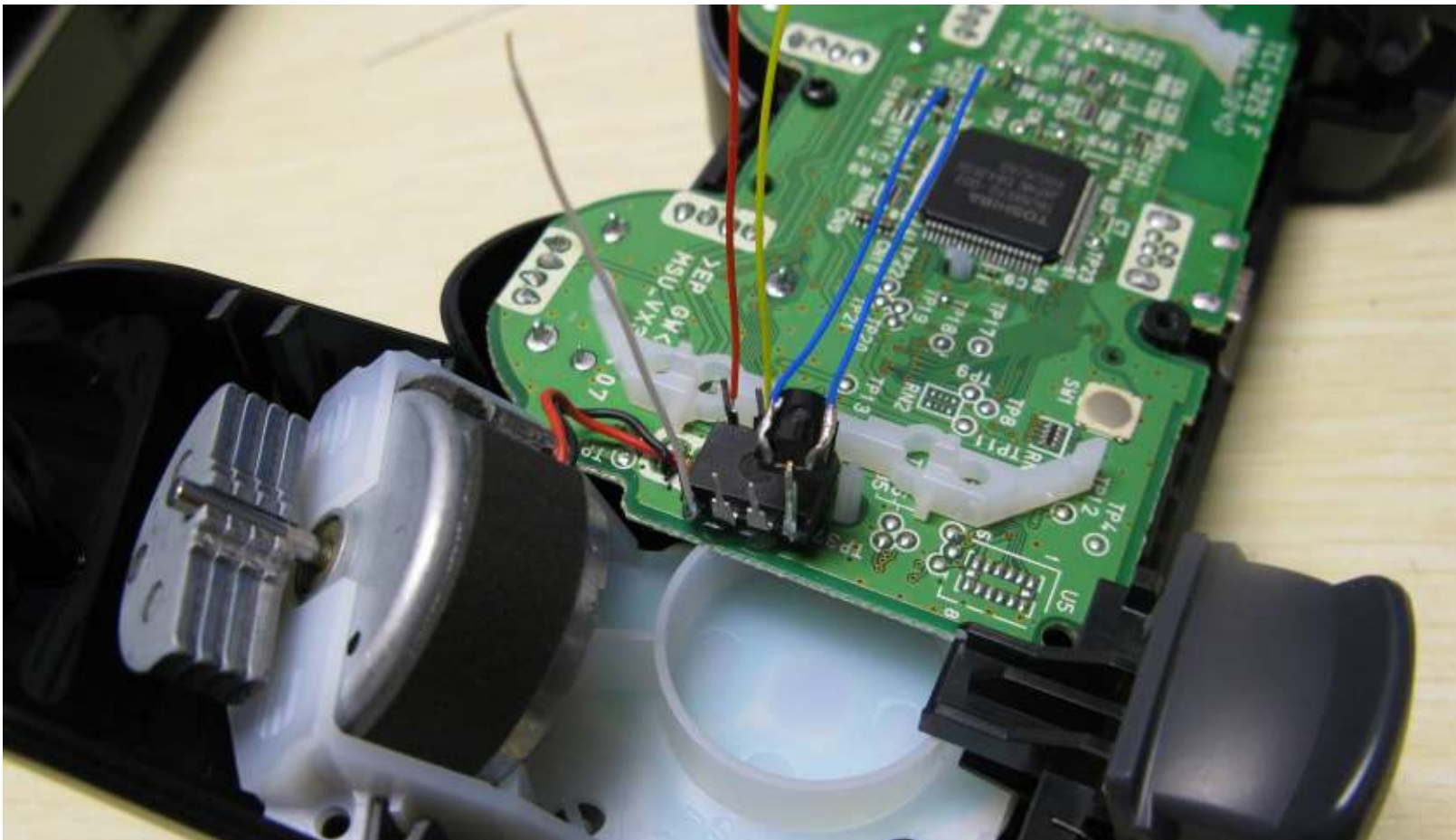


## Step 7: Mounting your Chip.

- We will proceed with the installation using the 3<sup>rd</sup> generation dual shock 3 controller as this is the hardest to work with due to the small solder points
- Start by using some hot glue to hold the chip and have pushed it right up against the white piece of all controller versions have this piece, so just make sure it is not hanging over the edge of the PCB

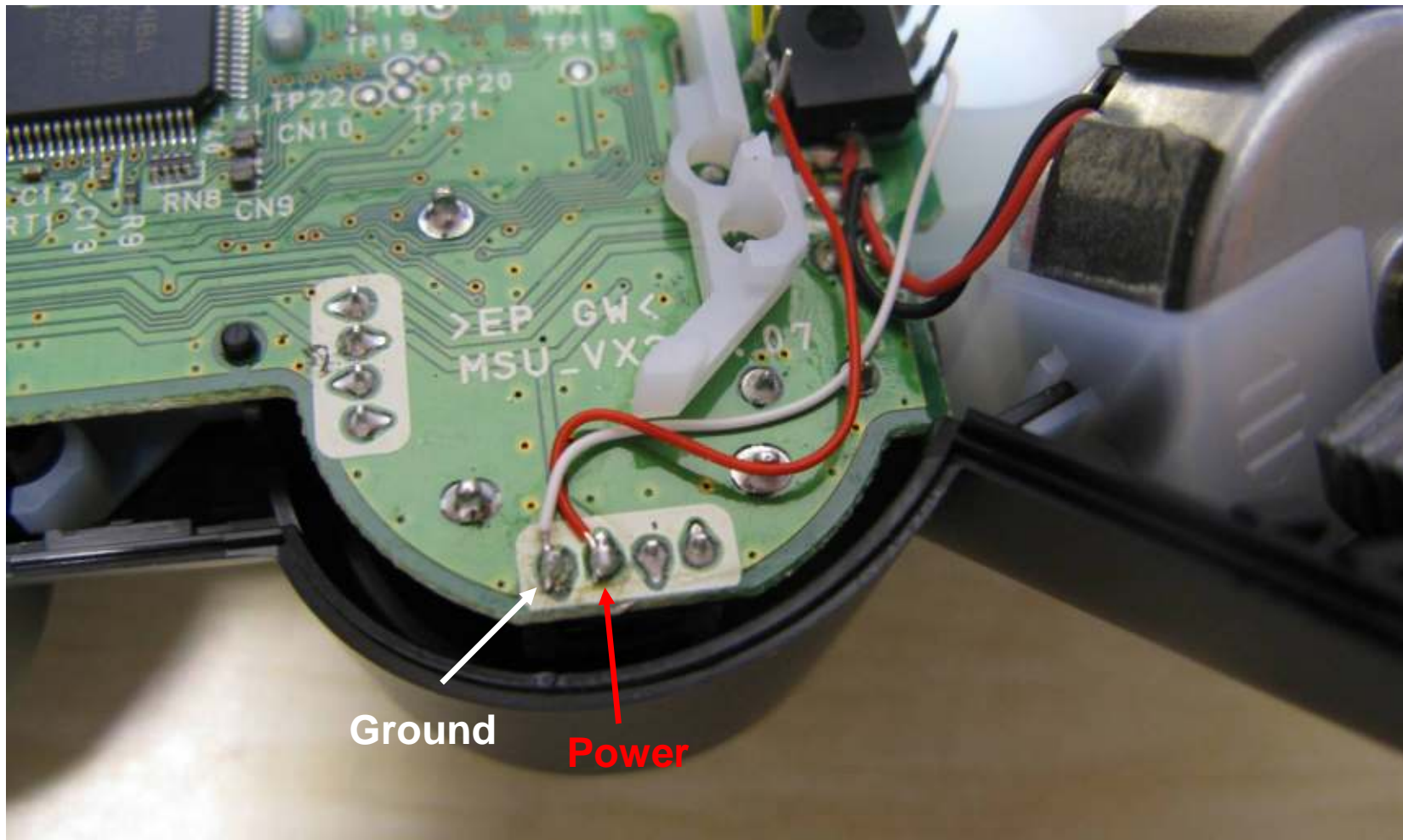
<sup>rd</sup> generation dual shock 3 controller as this is the hardest to work with due to the small solder points

transistor in place on the PCB. Notice that the white plastic that is sticking through the PCB (not anywhere in this general location). Just make sure the controller will not close correctly.



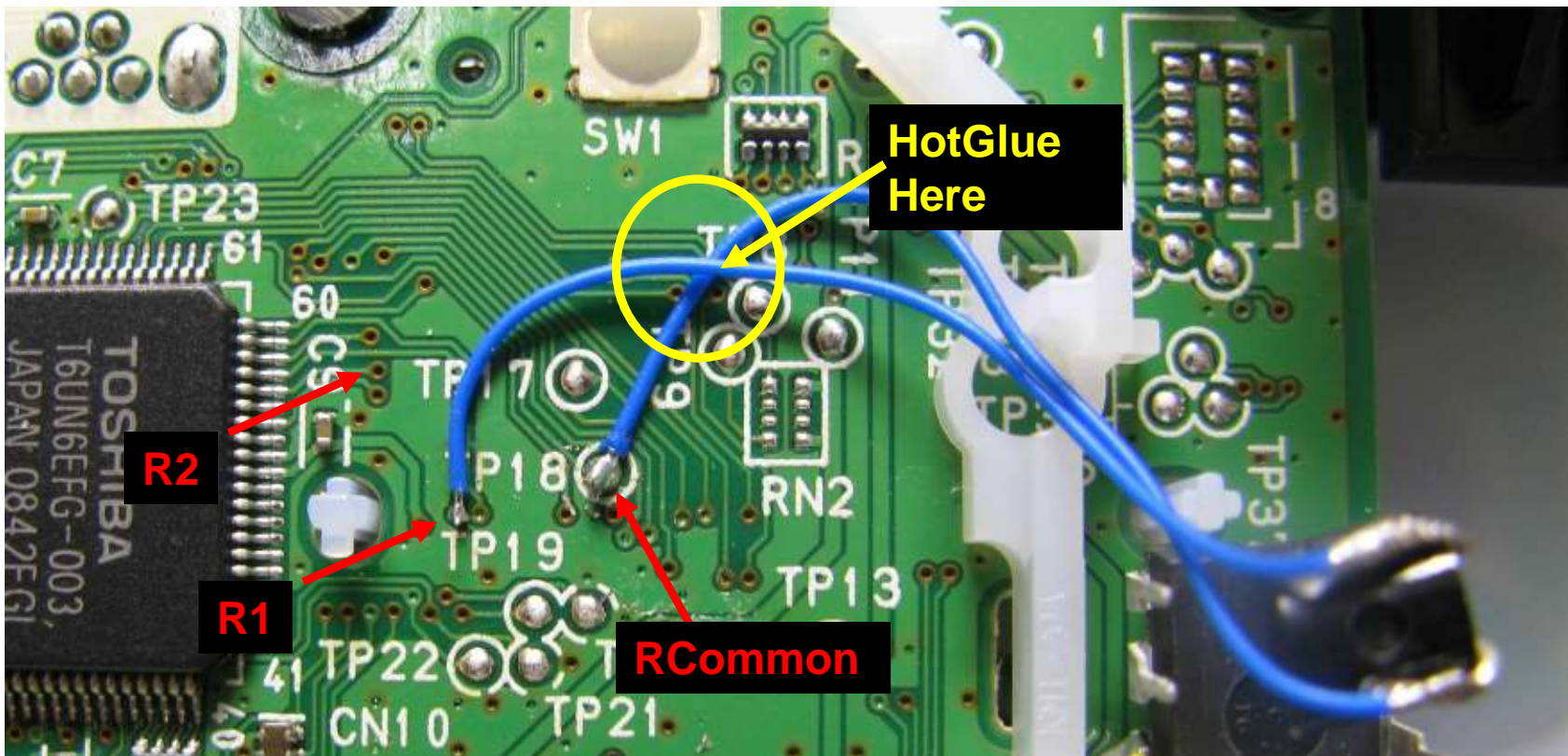
## Step 8: Attaching the power and ground.

- Refer to the controller identification for the proper power and ground points for your controller type.
  - *Note- All controllersexcept the old style sixaxis controller use the same power and ground as this image.*
- Here you can see the power and ground wires soldered in place. The power being the red wire and ground being the white wire.



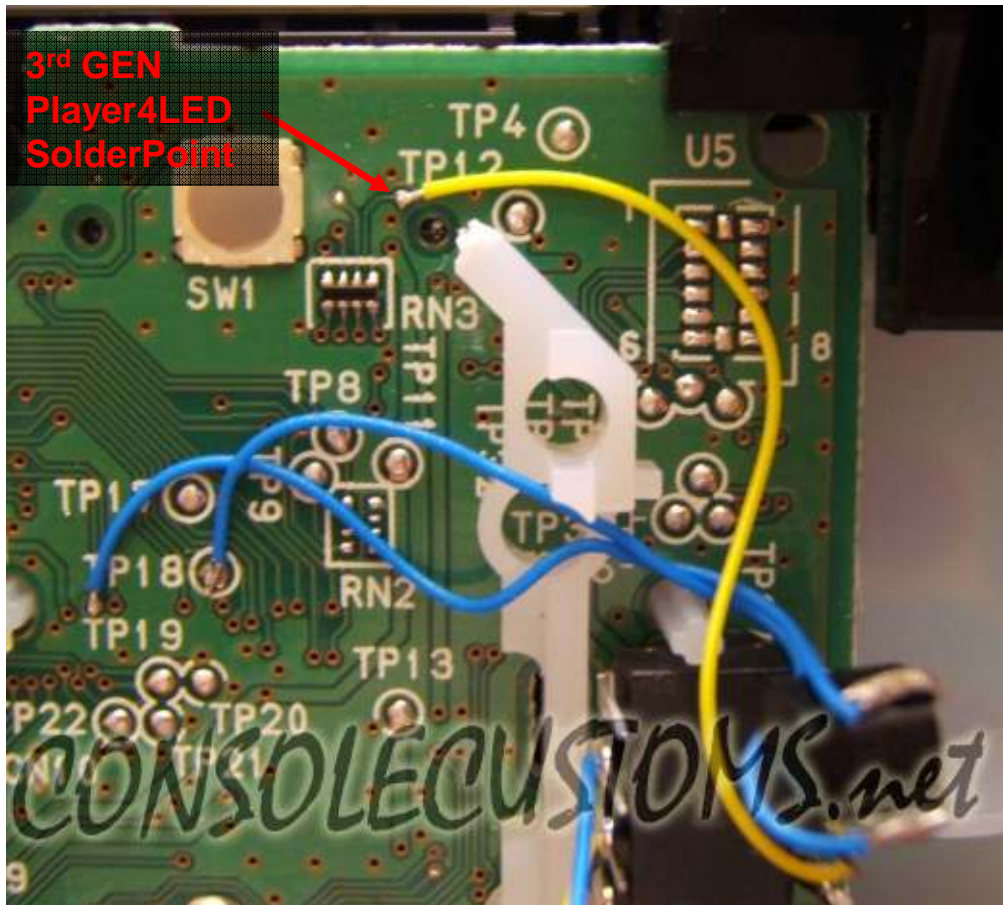
## Step 9: Attaching the R1 and R common wires.

- Again this is the 3<sup>rd</sup> generation dual shock 3 controllers shown. Refer to the controller identification to find the solder points for your controller.
  - You will solder one of the blue wires from the tra to either the R1 or R2 solder point depending on wh
  - As you can see the solder point for the R1 locatio over it that must first be scraped away with a knif small point to not expose metal around the points as rapid fire to not work.
  - Once you are done use some hot glue to hold these points. If you do it will make it much harder to go from solder point such as where the two wires cross
- nsist to the R common point on the controller and the other ich you want the button to perform the rapid fire or. non the 3<sup>rd</sup> gen is extremely small. It also has a coating eto expose the bare metal. Be careful when scrapin g this will open up an opportunity for a short causi ng the wires in place. Do not put hot glue directly on the solder back and fix a mistake, instead hot glue only the wires away sin our picture.

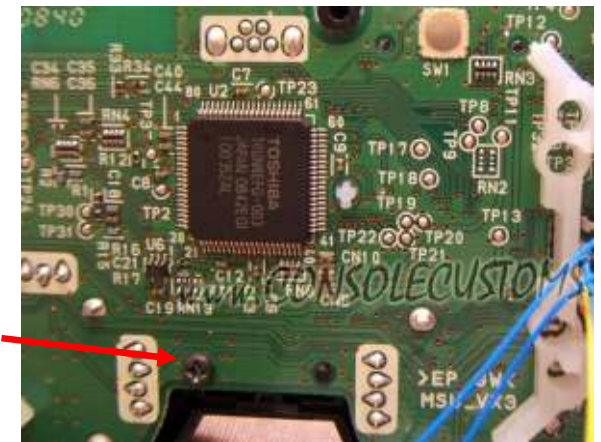


## Step 10: Attaching the LED wire.

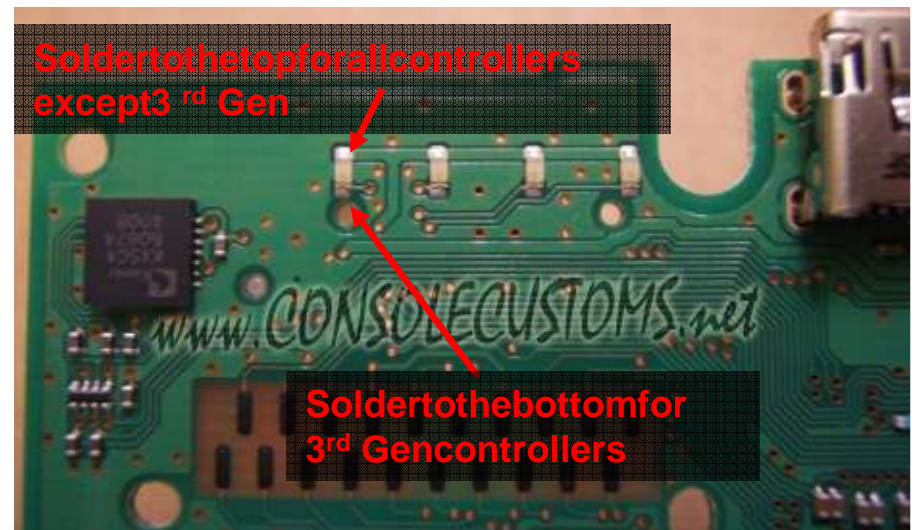
- Again this is the 3<sup>rd</sup> generation dual shock 3 controllers shown. Refer to the controller identification to find the solder points for your controller.
- There are two ways you can hook up the LED. One is using the LED points shown on the controller identification which are on the back of the PCB and easy to get to, but are really very small. The other option is to remove the PCB and solder directly to the LED. We will show you both methods.
- First is the left image using the small vias that are on the back of the PCB, on the 3<sup>rd</sup> gen that we are using you need to cut the battery holder for easy access to the vias. All other controller types do not require cutting the battery holder. Once you have the coating over the vias scraped you can solder your wire.
- The second method is to remove the PCB. To do so remove the small screw shown in the top right side image. And pull the PCB up. Watch the triggers as you are removing the PCB as they sit on the PCB. Also remove some Dual shock 3 controllers you may also need to unscrew the rumble motors.
- With the PCB out you will see some things similar to the bottom right side image. The player 4 LED is on the bottom right side of the LED, all other controller types you will solder to the top of the LED.



**Remove this  
Screw To  
remove PCB**

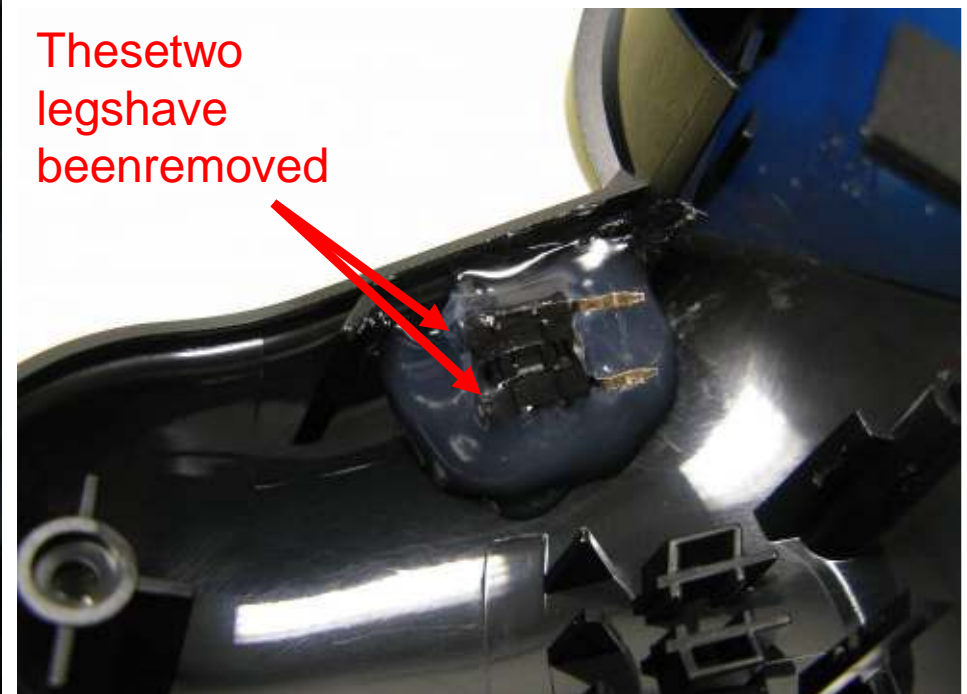
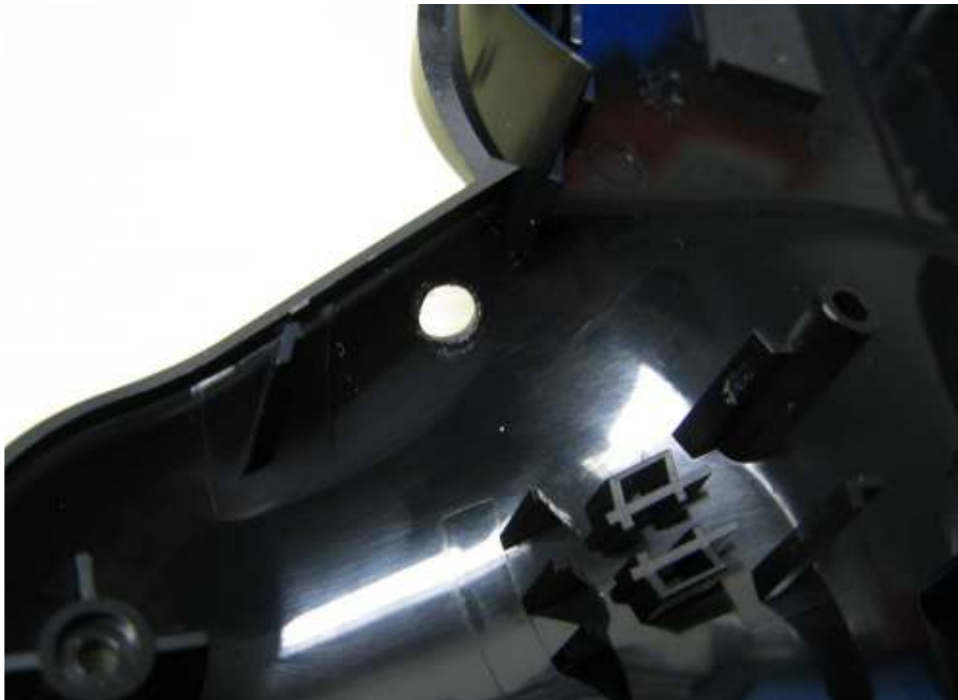


**Solder to the top for all controllers  
except 3<sup>rd</sup> Gen**



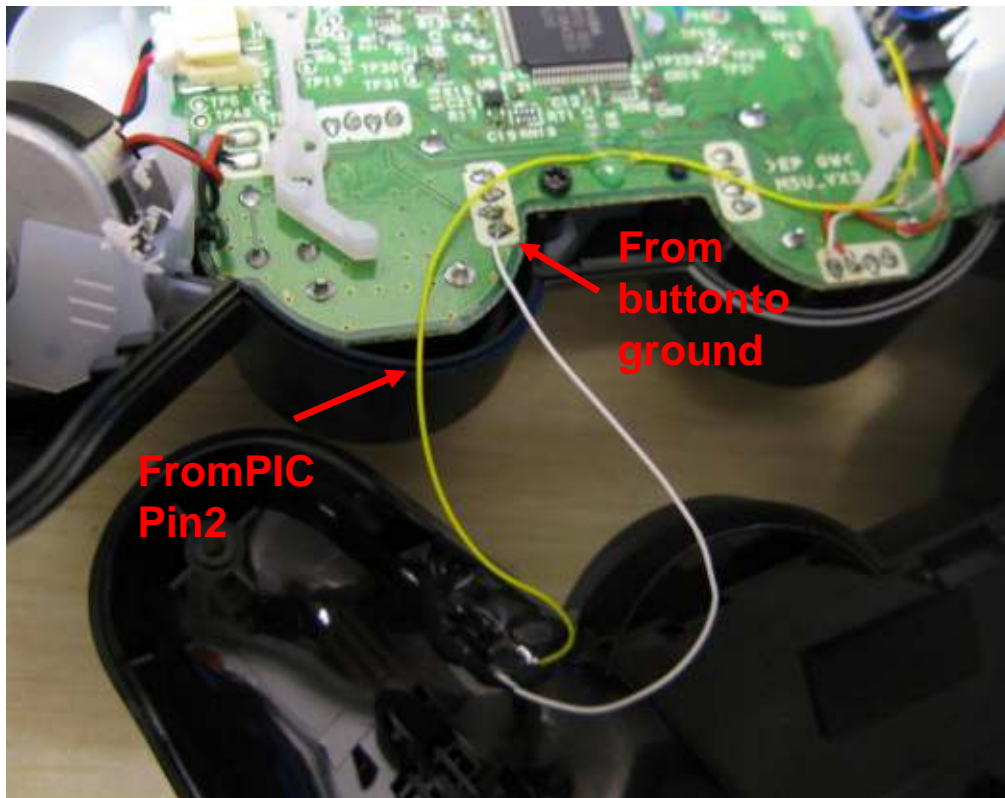
## Step 10: Installing the button.

- Using your 9/64<sup>th</sup> Drill make a hole for installing the button into your controller. We put ours on the inside of the right side hand grip. You can put where button wherever is comfortable for you. Just be sure there is clearance for the rumble motor or whatever else may interfere with the controller closing correctly.
- Your button has 4 legs on it and you really only need 2. When looking at the button you will see it has two legs on one edge of the button and two on the other. You want to remove two legs that are on the same edge. You will end up with a button that has three sides with no legs and one side with two legs. See the right side image below for additional information.
- Finally use a generous amount of hot glue to hold the button in place.



## Step 11: Final Steps.

- Connect the wire from pin 2 of the PIC to one of the legs of the button. Shown here as the yellow wire.
- Finally use a piece of wire to connect the second leg of the button to ground. In this picture this is the white wire.
  - Note: this picture again shows the 3<sup>rd</sup> gen dual shock 3 controller. All of the controllers can use this same grounding point except the old style six axis. For the old style six axis refer to the controller identification images for different ground points.



Thank you for purchasing one of our custom PlayStation 3 Rapidfire controllers. We appreciate your business and work hard to provide a 5 star experience to all of our customers. If for any reason you are having trouble with your controller or have general questions, please contact us at [consolecustoms@yahoo.com](mailto:consolecustoms@yahoo.com). Below you will find helpful information on using your new controller or mod.

### PS3RFP-1 Single speed rapidfire:

- This mod has many different features and functions which we will explain below. Video instructions are available for all of these features on our website [www.youtube.com/consolecustoms](http://www.youtube.com/consolecustoms) or from our youtube page [www.youtube.com/consolecustoms](http://www.youtube.com/consolecustoms).
- This controller has 4 speed settings but they can only be used/accessed one at a time. The controller will come in the default speed 1. To change the speed the controller must first be OFF and NOT plugged into a charge/sync cable. While holding the button on the back, press and hold the button on the back. You should see the player 4 LED flash. It will flash er OFF, press and hold the button on the back. It will flash speed 1, 2 flashes = speed 2, etc... The controller can only be used/accessed one at a time. The controller can go from speed 1 to speed 3 you will need to turn the controller off and back on again two times. Each time holding in the button when you turn on the controller.
  - **Speed1:** COD4/MW2 fast speed
  - **Speed2:** COD5 fast speed
  - **Speed3:** COD4/5 slow speed
  - **Speed4:** GTA4 (Rapidfire must be installed on R2 for GTA4)
- Once you have selected your speed you will fire using the button on the back. The button always fires with rapidfire and R1 always fires normally.

Thank you,  
Console Customs