

# The First Soldering

solder



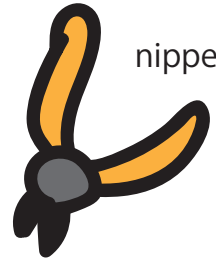
soldering  
iron



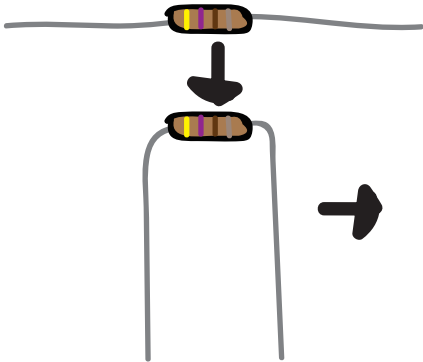
**Hot!**

about 300 degree  
same as an iron plate  
for roast

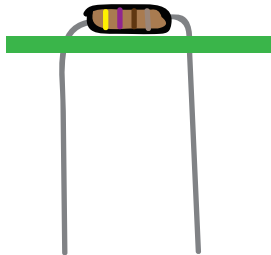
nipper



1. find the part (first of all is R1 resistor has line colors: yellow, purple, brown, gold)

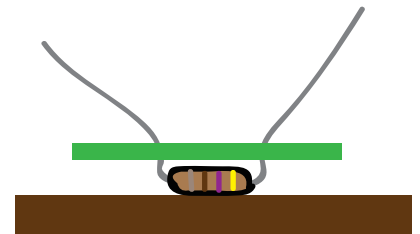


2. bend by fingers

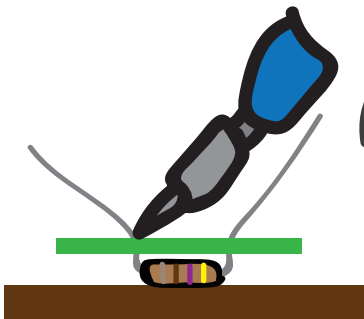


3. put into the board

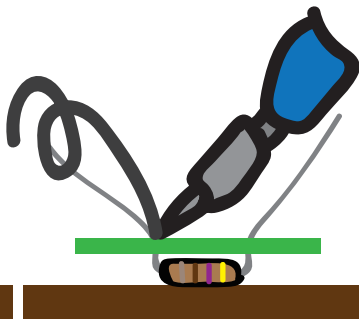
★ direction is important!



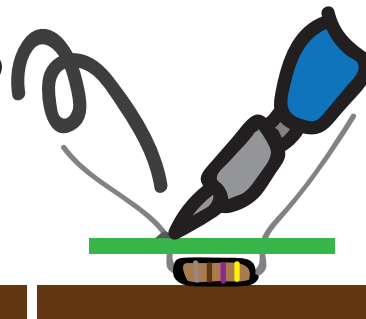
4. bend a little to fix  
and flip the board



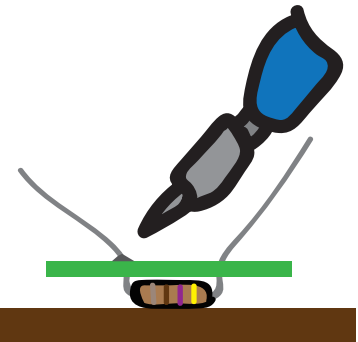
1. warm both the board  
and the wire by the iron  
(about 5 seconds)



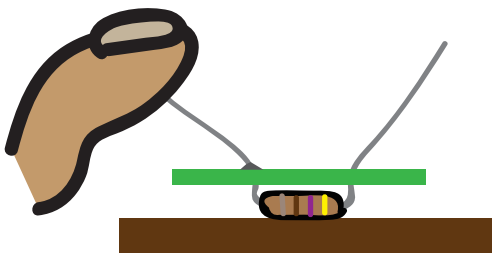
2. melt the solder  
if you can't, back to 1



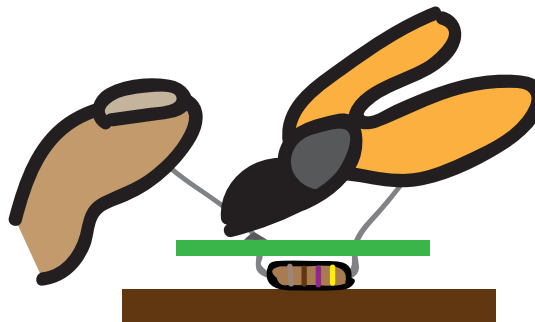
3. leave the solder



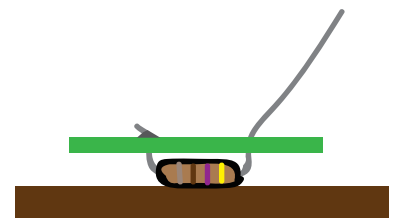
4. leave the iron  
triangle shape is the best!  
if not enough, back to 1



1. attach the wire by the finger  
(danger to jump the wire)



2. cut the wire by the nipper  
(a little above the triangle)




completed!! go a head!

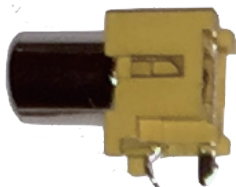


<http://ichigojam.net/>

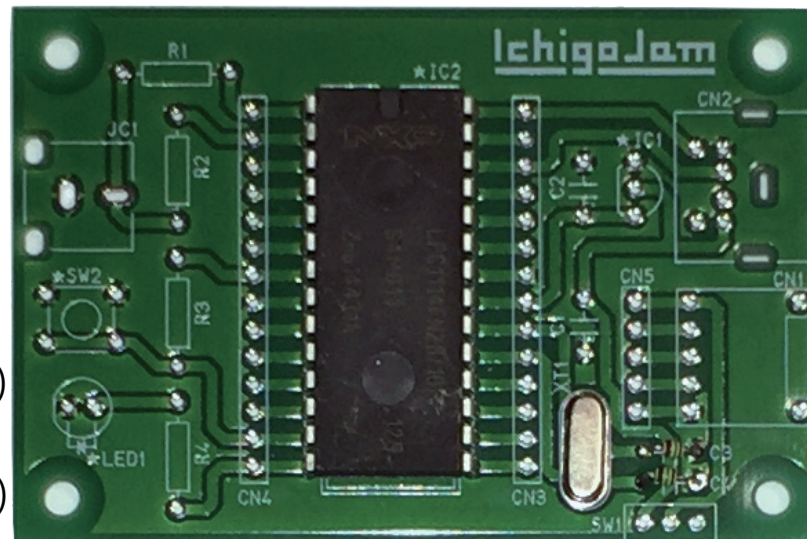
# IchigoJam half kit

No is recommended to build  
 Let's start from 1!!  
★ mark: direction is important

10. JC1 video terminal



IchigoJam PCB (board)



1. R1-R4 resistor

R1: yellow purple brow bold ( $470\Omega$ )

R2: brown black brown gold ( $100\Omega$ )

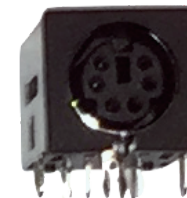
R3: brown black green gold ( $1M\Omega$ )

R4: orange orange brown gold ( $330\Omega$ )

4. capacitor  
C1/C2



9. CN2 PS/2 terminal  
(for the keyboard)



2. CN1 microUSB  
(for the power source)

5. ★ LED right: the long wire



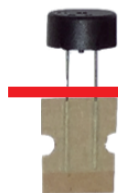
3. ★ SW 1 right  
power switch



6. SW2 tact switch  
(button)



12. sounder



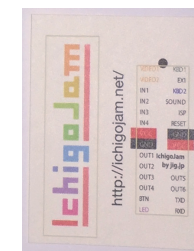
cut by nipper  
put in to  
GND and SOUND  
pins



8. pin socket  
to the straight!



7. ★ IC1 right: rounded  
regulator



11. ★ IC2  
up: black circle  
seal the CPU

# IchigoJam first step

Light up the LED

**LED1**

Type in "LED1" and push Enter key

Light off the LED

**LED0**

Don't forget Enter key

Order your computer to wait for a while

**WAIT120**

"WAIT120" means "wait 2sec" Q:"WAIT60" means?

**WAIT60**

Light up the LED 1sec ( **:** to join commands)

**LED1:WAIT60:LED0**

Push UP key twice.

Push RIGHT key 12 times.

Push Backspace key to delete "6".

Type "12". Push Enter key to modify your order.

**LED1:WAIT120:LED0**

Blink the LED

(Push Space key to input space)

```
10 LED1:WAIT60
20 LED0:WAIT60
30 GOTO10
```

Type in "RUN"+Enter to start your program

**RUN**

F5 key works the same way

ESC key stops the program

"LIST"+Enter displays your program list

**LIST**

F4 key works the same way

Can you blink the LED more fast?

Enter key to tell computer your modification

You can save up to four programs (0 to 3)

**SAVE0**

F3 key types in "SAVE"

After reboot your computer,  
you can reload that program.

**LOAD0**

F2 key types in "LOAD"

Type in "NEW" to erase your program.

**NEW**



# IchigoJam mini games

How fast? (Push the IchigoJam button after LED)

```
10 LED 0
20 WAIT RND(180)+60
30 LED 1:CLT
40 IF BTN()=0 GOTO 40
50 ?TICK()
```

Typing! (Type in A to Z)

```
10 LET N,65:CLT
20 ?CHR$(N);
30 IF INKEY()<>N GOTO 30
40 LET N,N+1:IF N<>91 GOTO 20
50 ? :?TICK()/60
```

Calc! (Calculate the sum fast)

```
10 LET N,0:CLT
20 LET A,RND(10)
30 LET B,RND(10)
40 ?A;"+";B;"=";:INPUT C
50 IF C!=A+B ?"NG!":END
60 LET N,N+1:IF N<10 GOTO 20
70 ?TICK()/60
```

Downstream (RIGHT and LEFT key to avoid)

```
10 LET X,16:CLS:CLT
20 LET K,INKEY()
30 IF K=RIGHT LET X,X+1
40 IF K=LEFT LET X,X-1
50 IF SCR(X,5) ?TICK()/60:END
60 LC X,5:"O"
70 LC RND(32),23:"*"
80 WAIT 3
90 GOTO 20
```

Baseball! (Push the IchigoJam button to hit)

```
10 LET Y,0
20 CLS
30 LC 4,15:"%"
40 LC 5,Y:"O"
50 IF BTN() GOTO 90
60 LET Y,Y+1
70 WAIT 6
80 GOTO 20
90 IF Y=15 ?"HIT!"
```

Screen jack! (Type in any key)

```
10 LET C,1:CLS
20 LC RND(32),RND(22)
30 ?CHR$(C)
40 LET K,INKEY():IF K=C
50 GOTO 20
```



Push Shift key to type in '(', ')', or ''



Programming in BASIC!



Kid's PC

IchigoJam



<http://ichigojam.net/>