



PINGUINO GUIA DE MOTAJE



MATERIALES

A coiled white USB extension cable with two male USB connectors, set against a blue background. The cable is neatly coiled into a circle, with the two connectors positioned at the top and bottom. The connectors are white plastic with a silver metal contact area. The text "EXTENSIÓN USB MACHO MACHO" is overlaid in the center of the image.

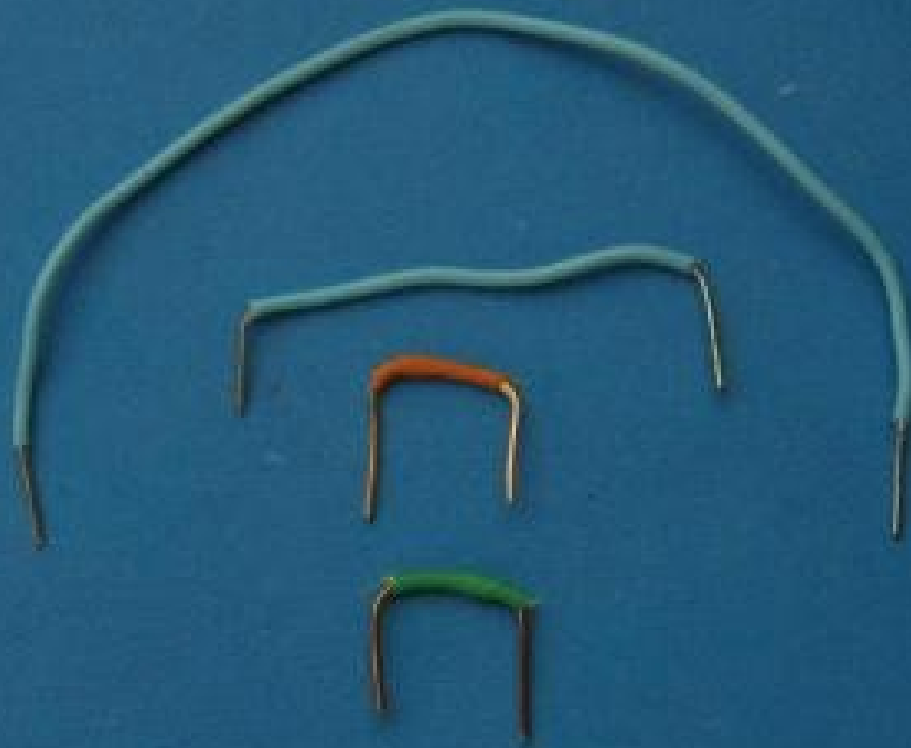
EXTENSIÓN USB MACHO MACHO

6 CABLES NEGROS



4 CABLES ROJOS





**4 CABLES DE
CUALQUIER COLOR**



10 Kohm



470 ohm



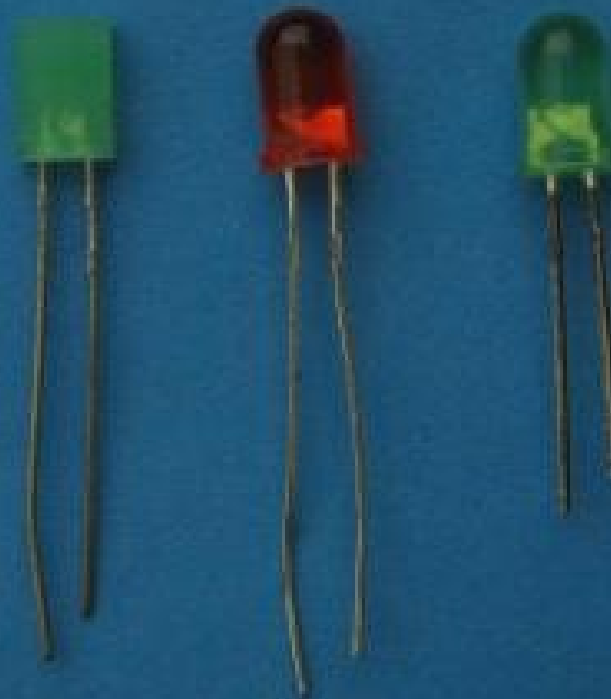
470 ohm



470 ohm

4 RESISTENCIAS

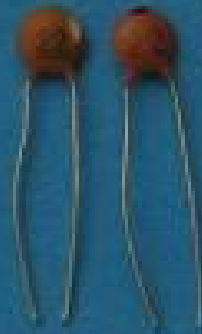
3 LEDs



5 CAPACITORES



0.1 uf
104



22 pf
22

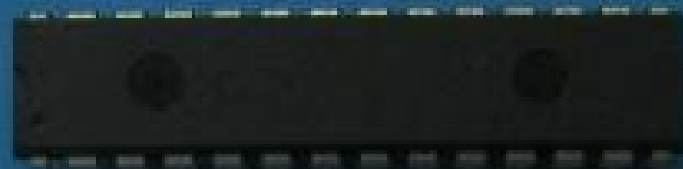


220 nf
224



10 uf

PIC 18F2550



PULSADOR



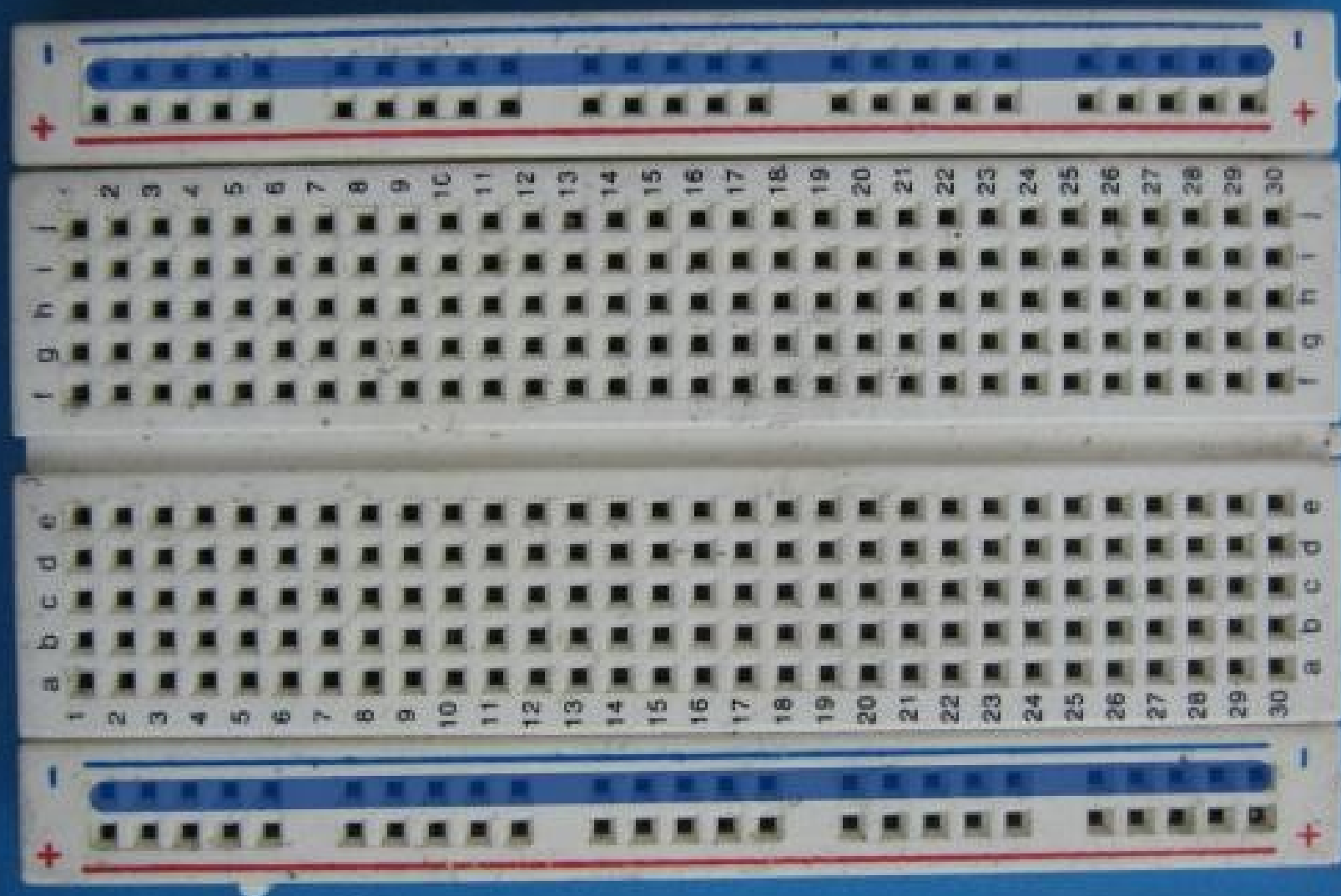
**CUARZO
20 Mhz**



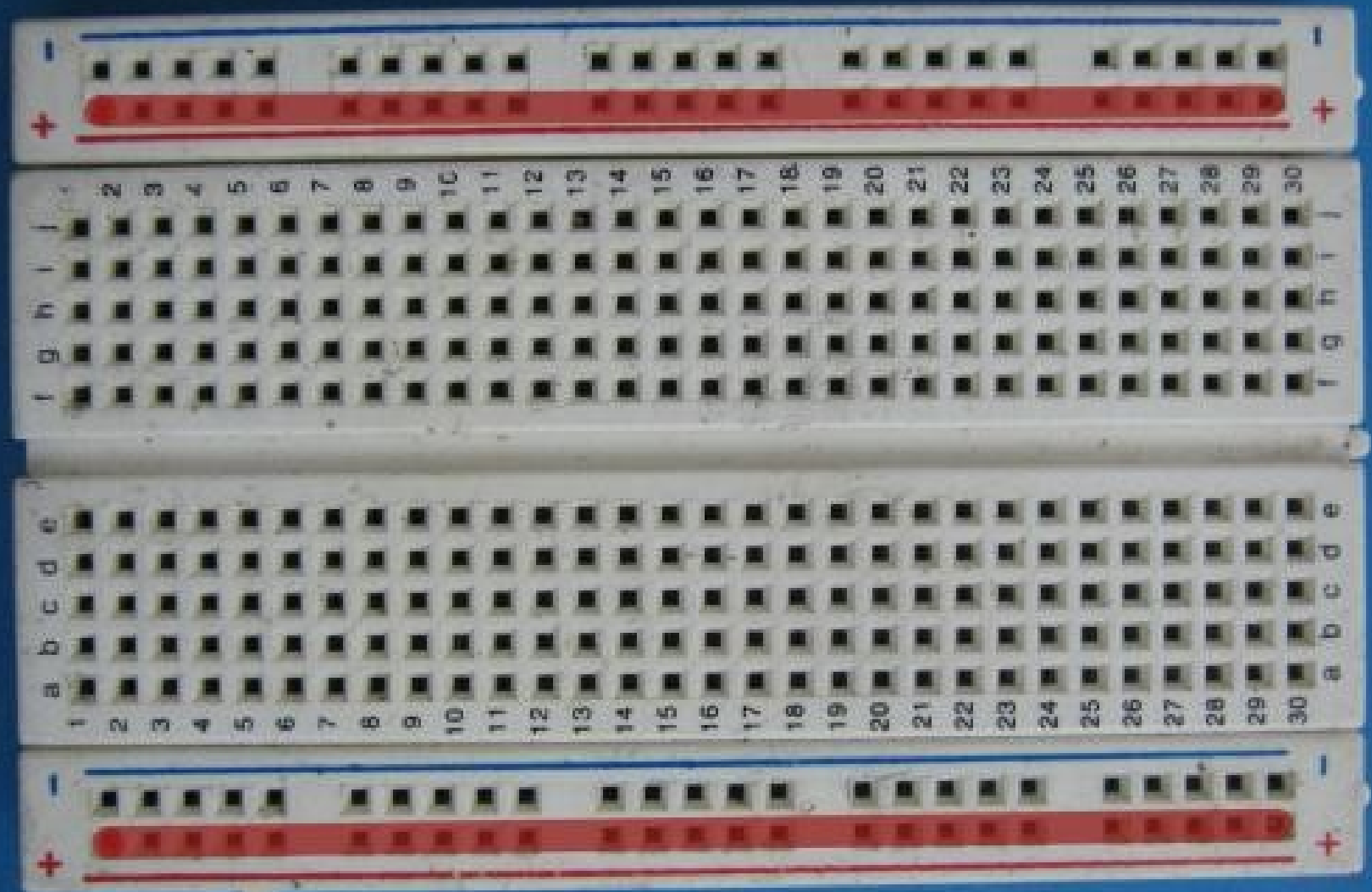
**CONECTOR USB
HEMBRA**



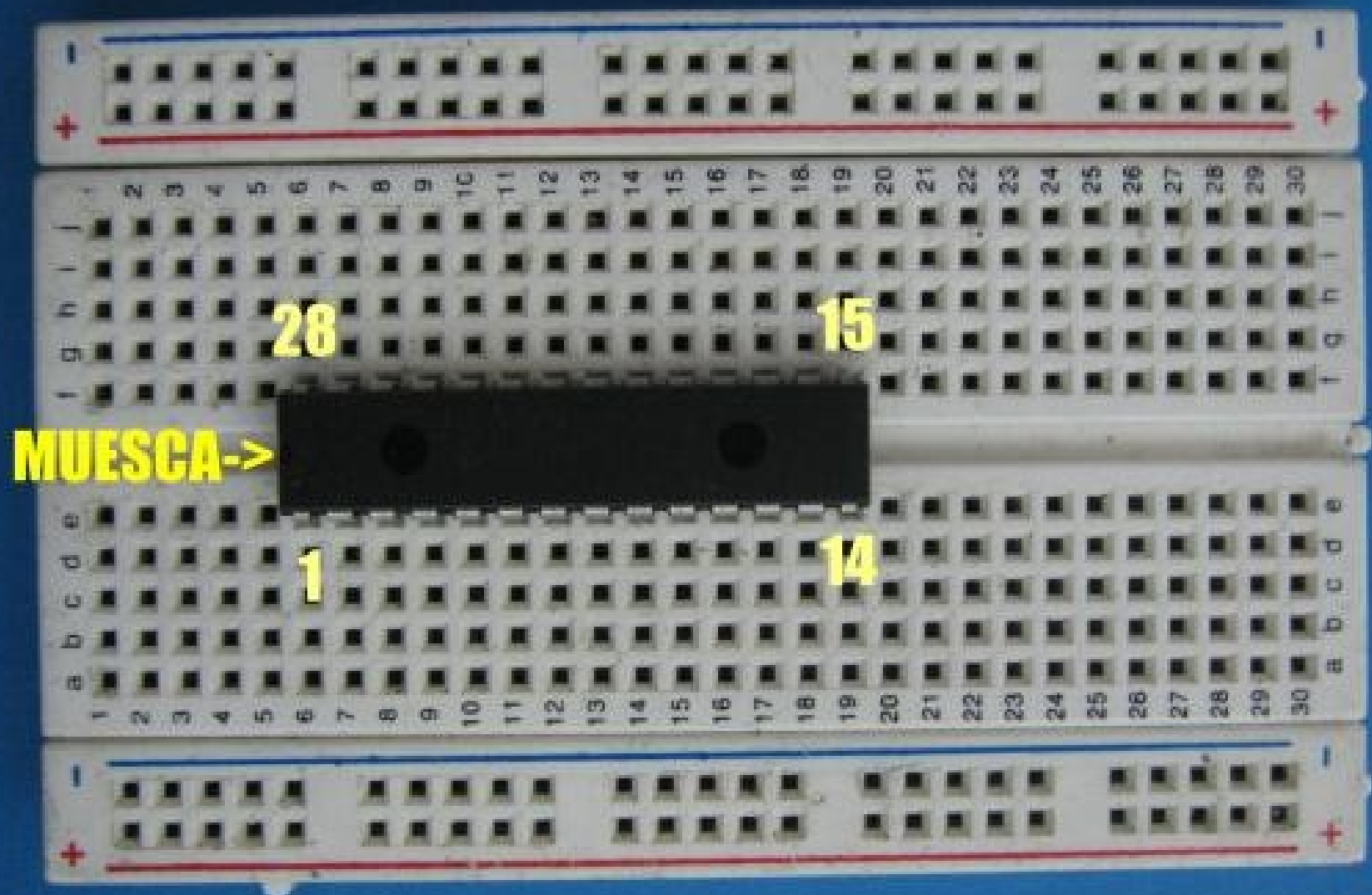
MONTAJE



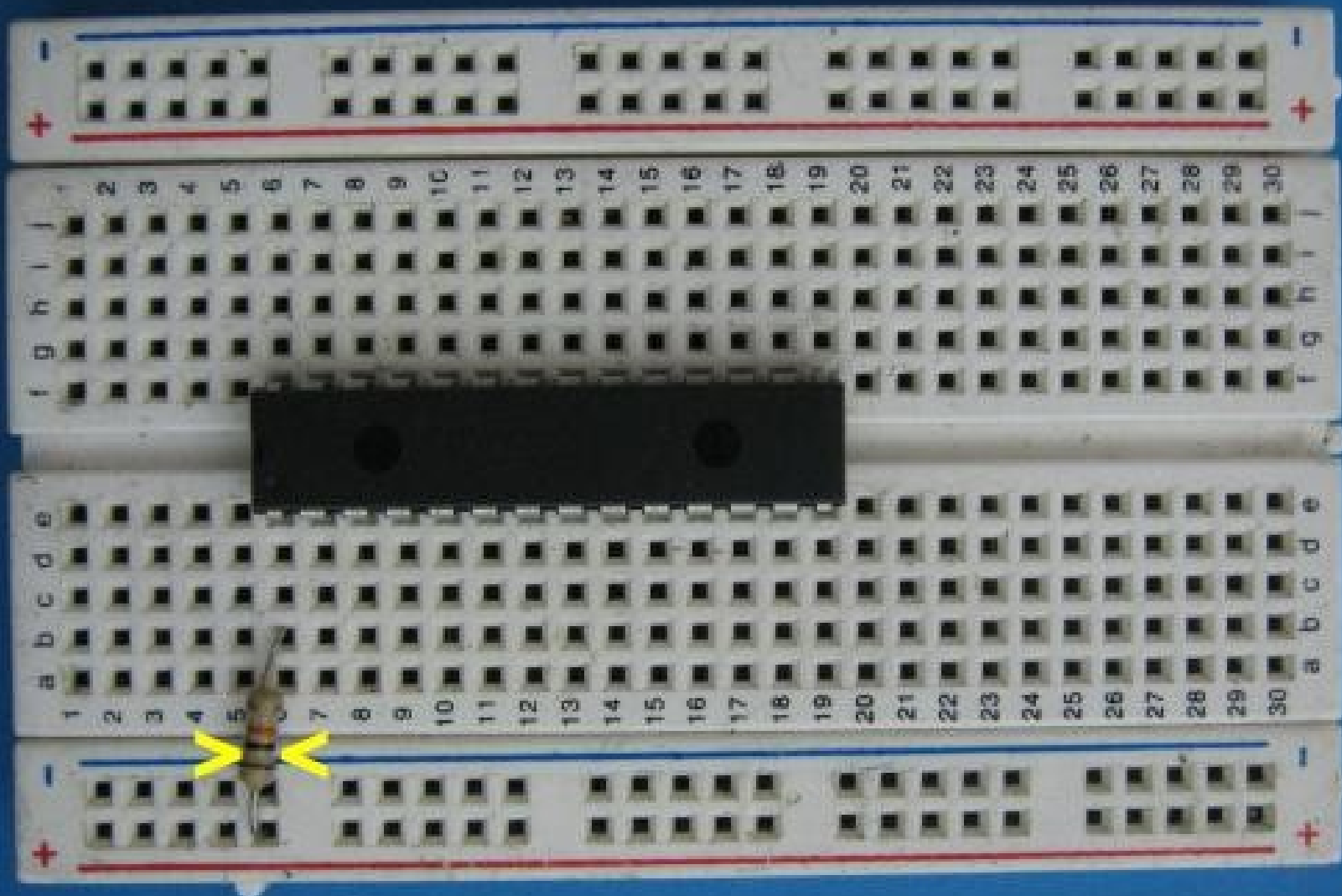
LA PISTAS SUBRAYADAS SERAN REFERENCIADAS COMO TIERRA



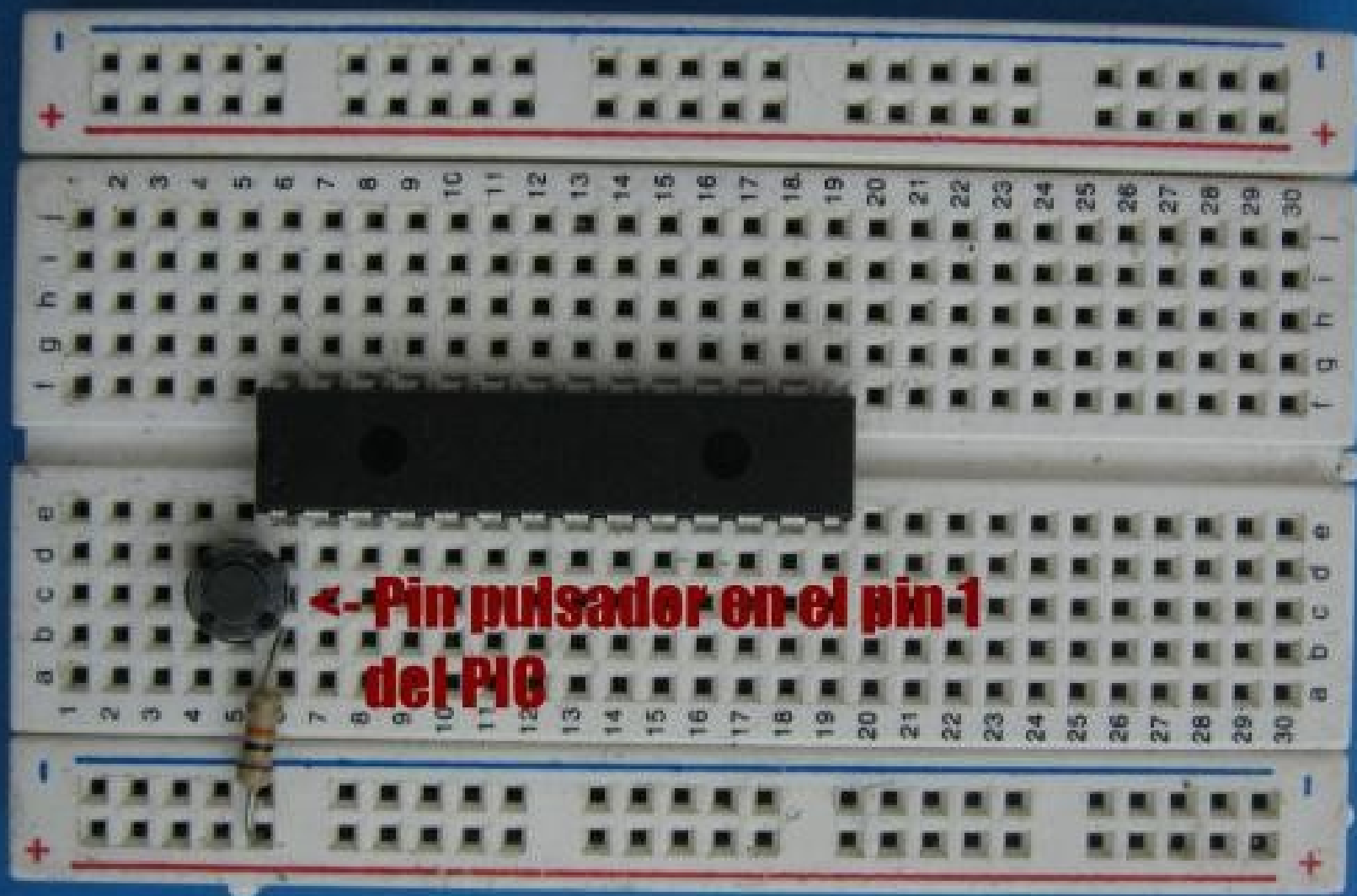
LAS PISTAS SUBRAYADAS SERAN REFERENCIADAS COMO VCC



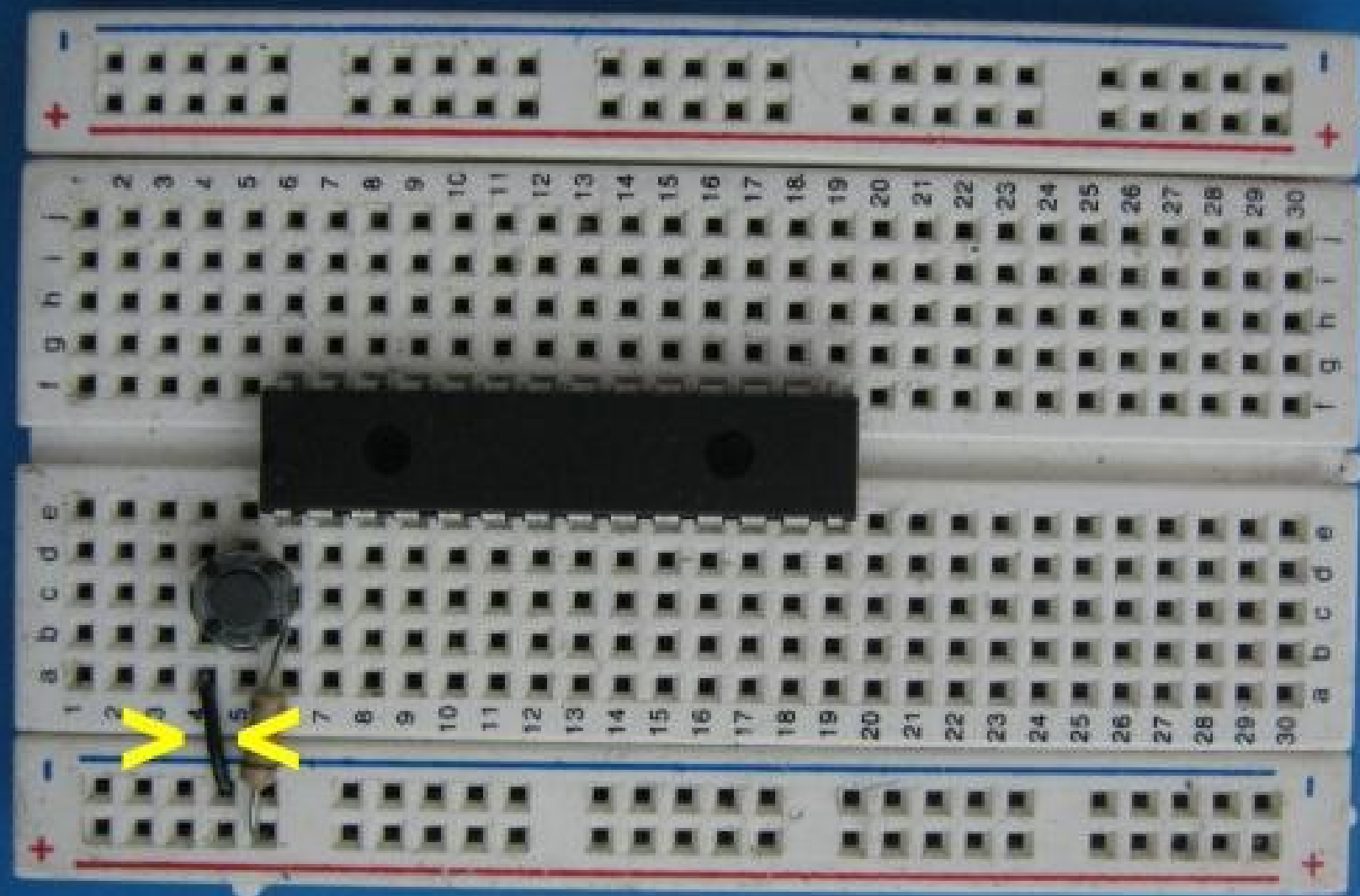
LOS PINES SE ENUMERAN EN SENTIDO CONTRARIO A LAS MANECILLAS DEL RELOJ A PARTIR DEL PUNTO O MUESCA DEL PIC



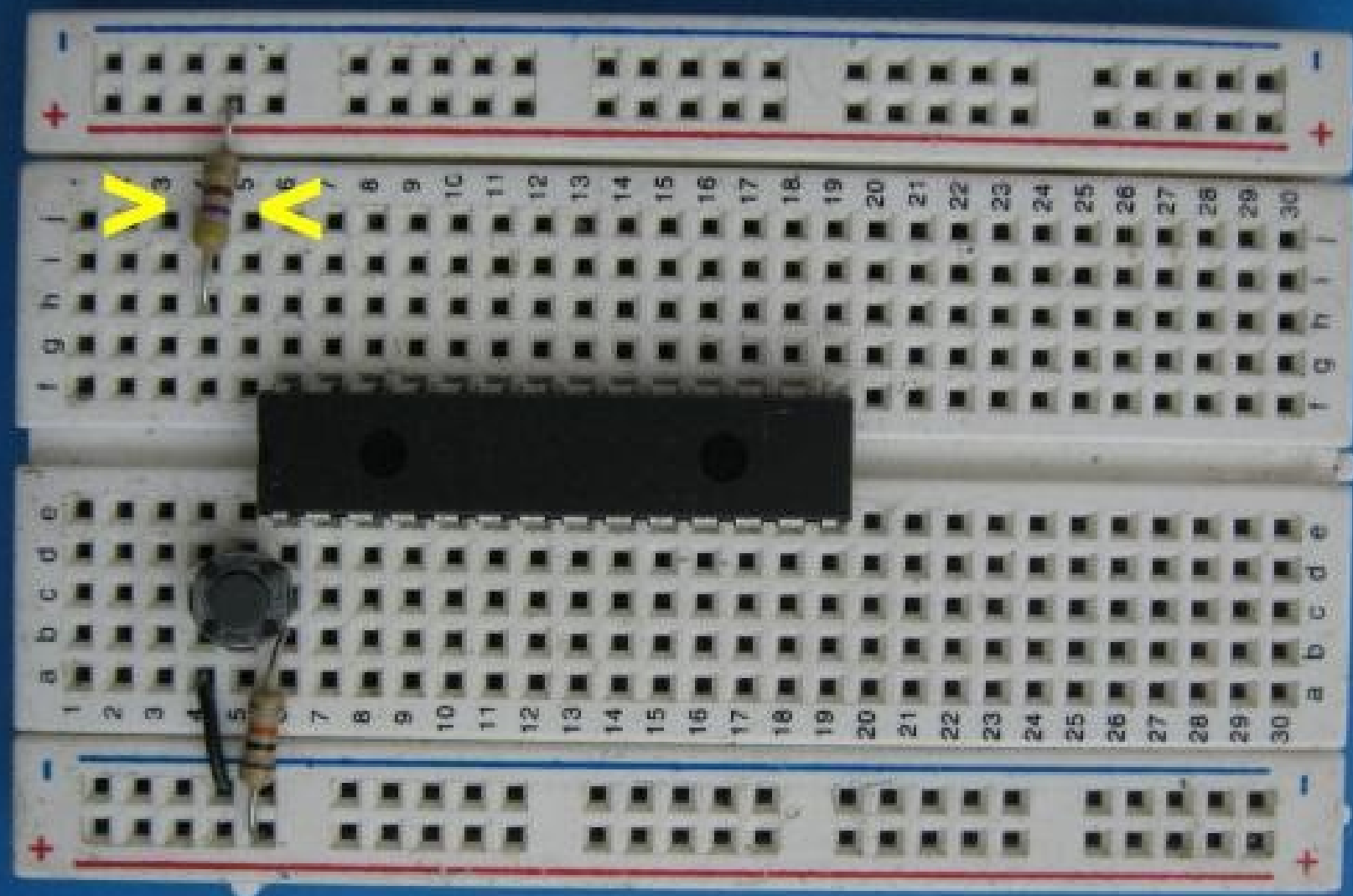
RESISTENCIA DE 10Kohm ENTRE EL PIN 1 Y VCC



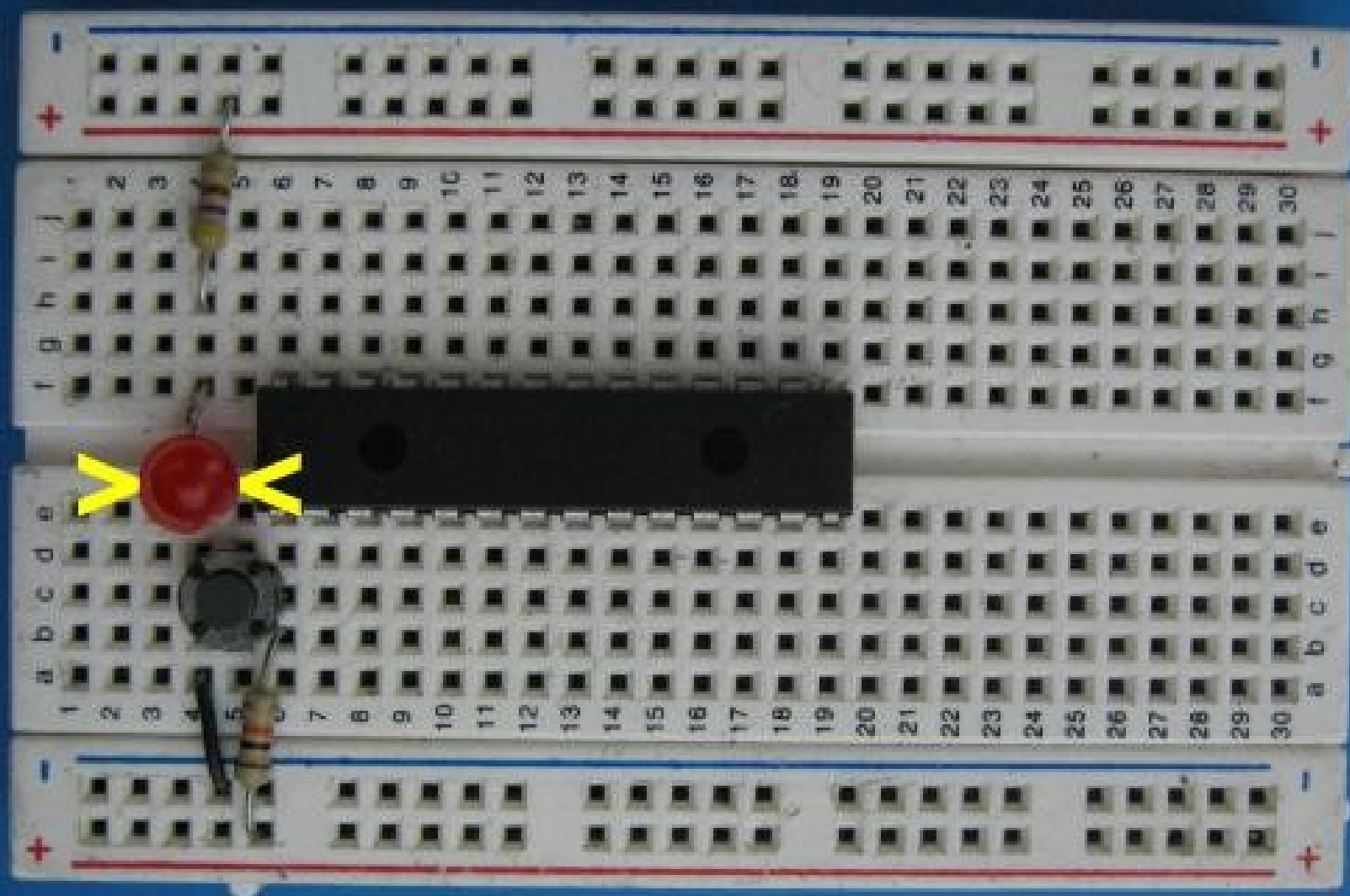
← Pin pulsador en el pin 1
del PIC



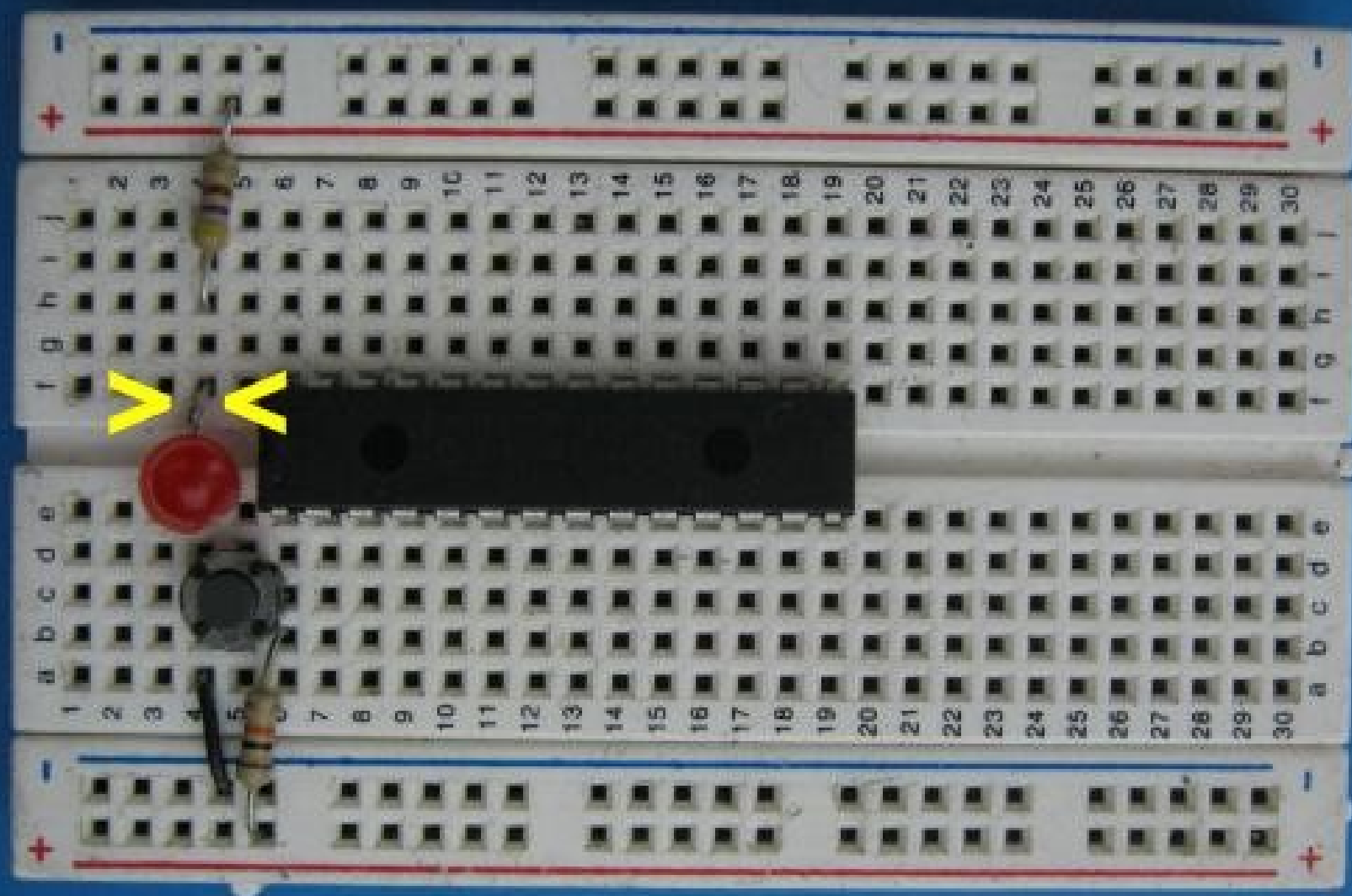
CONEXION DEL PULSADOR A TIERRA



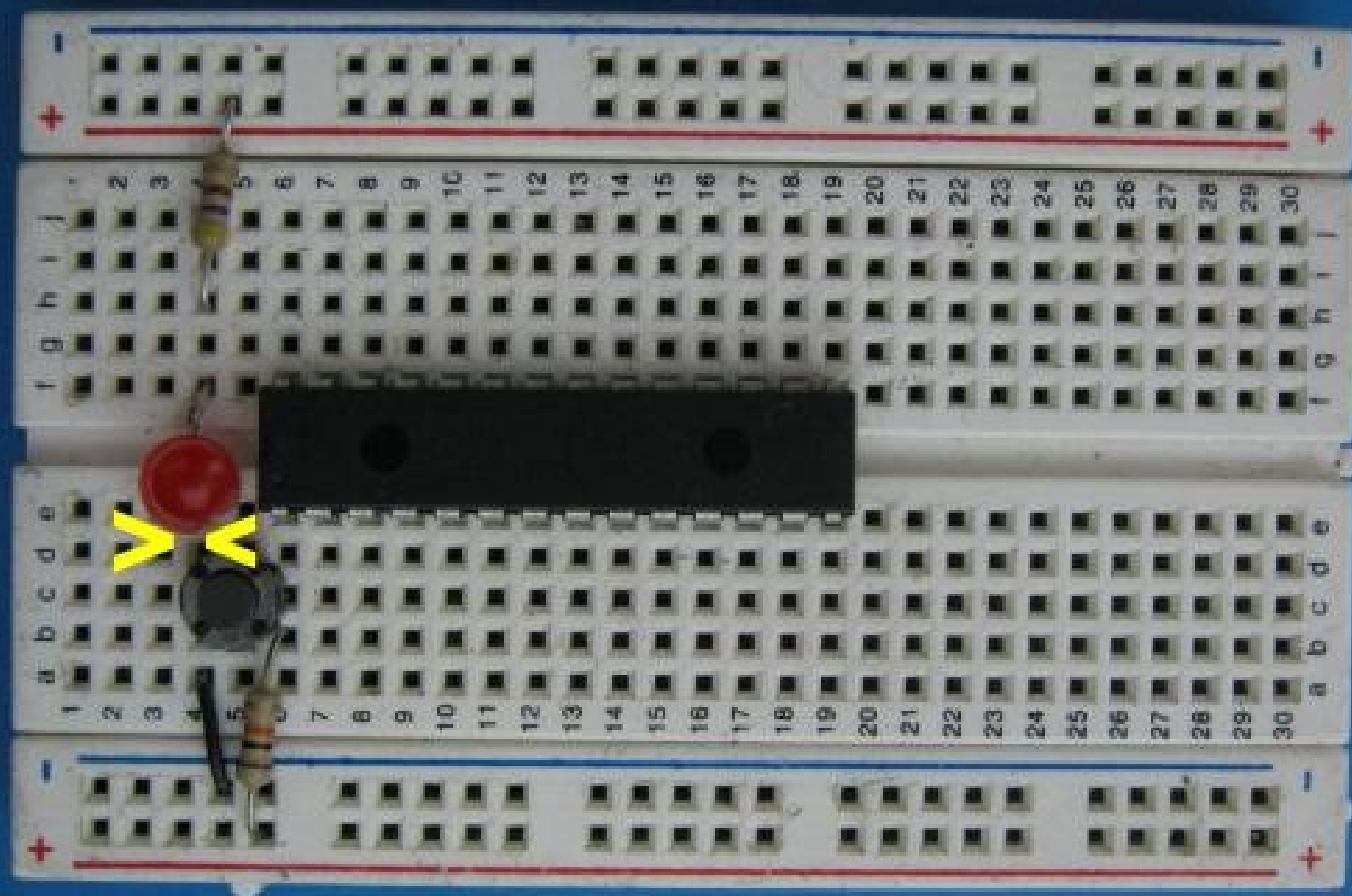
470 ohm (amarillo violeta cafe)



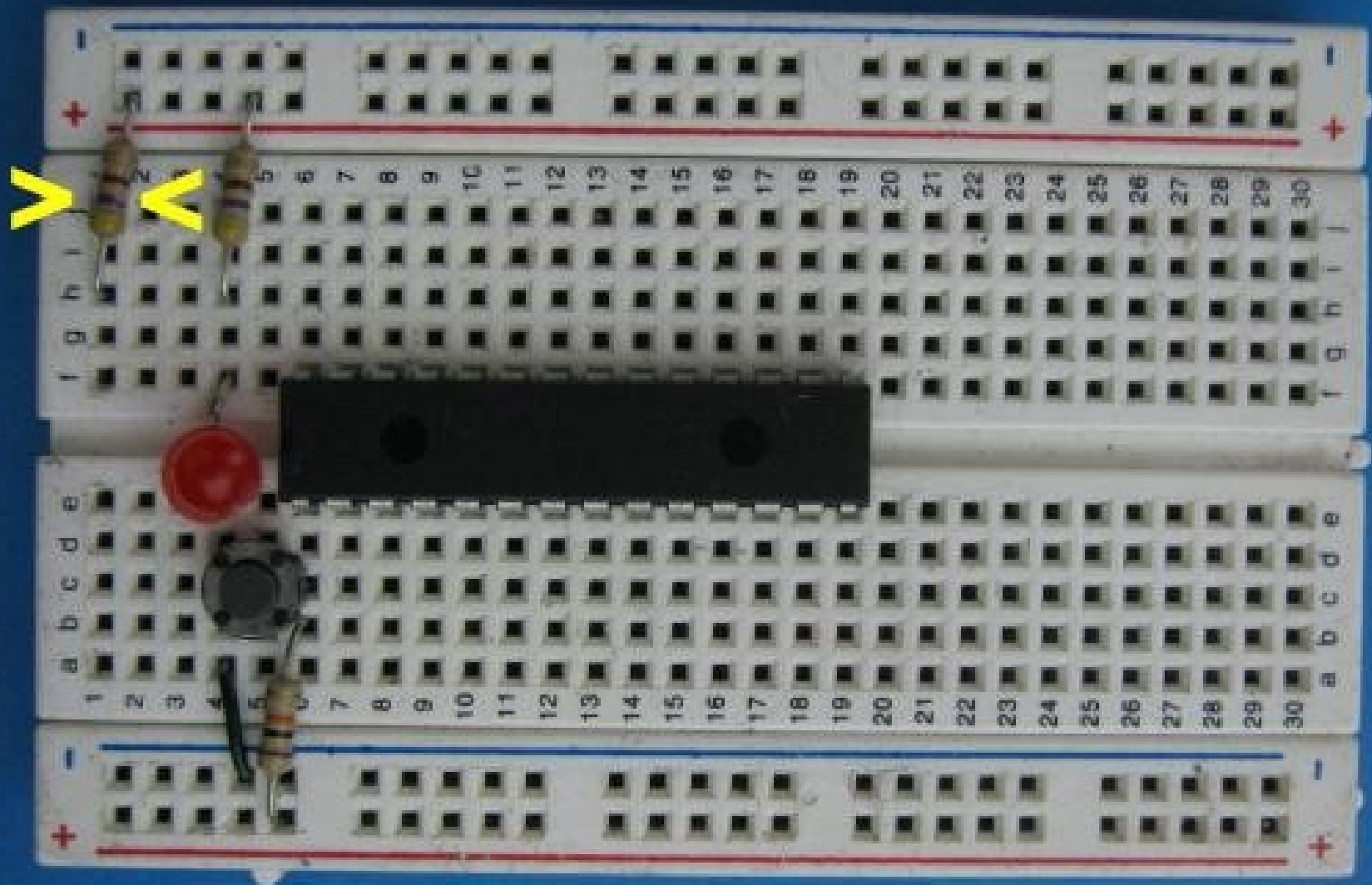
LED DE INDICACION DE ALIMENTACION



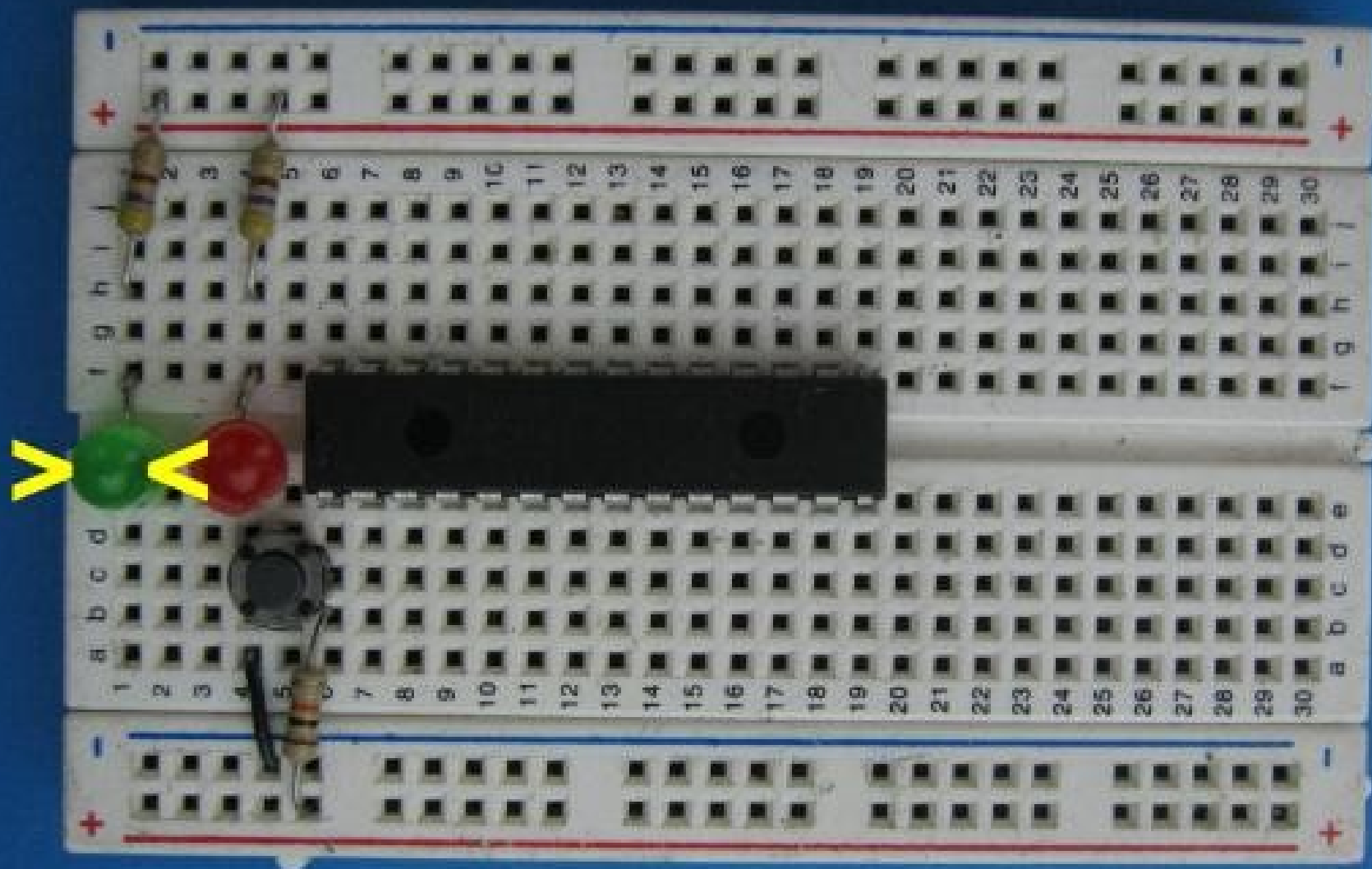
ANODO DEL LED (PATA LARGA)



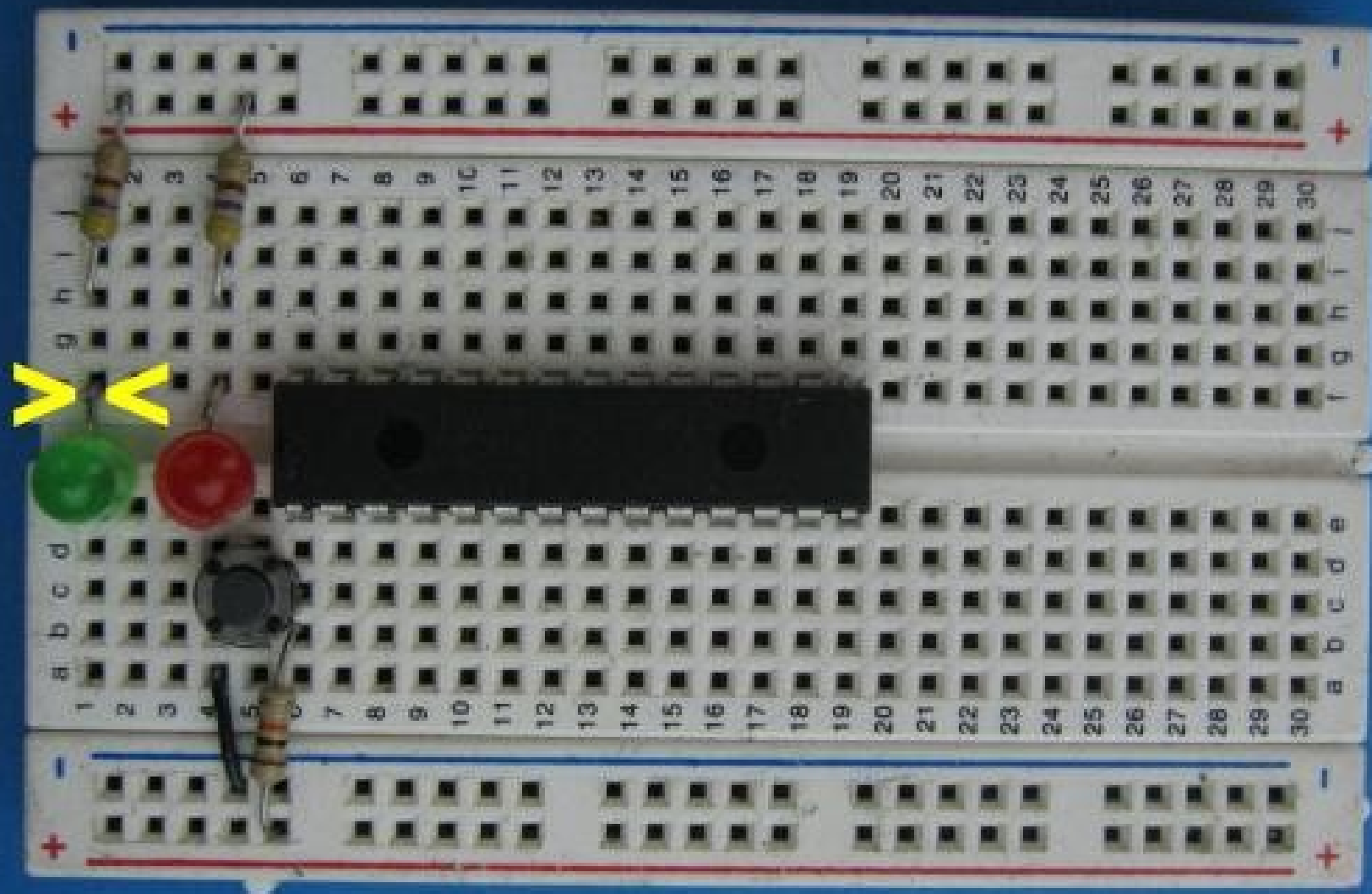
CATODO DEL LED (PATA CORTA)



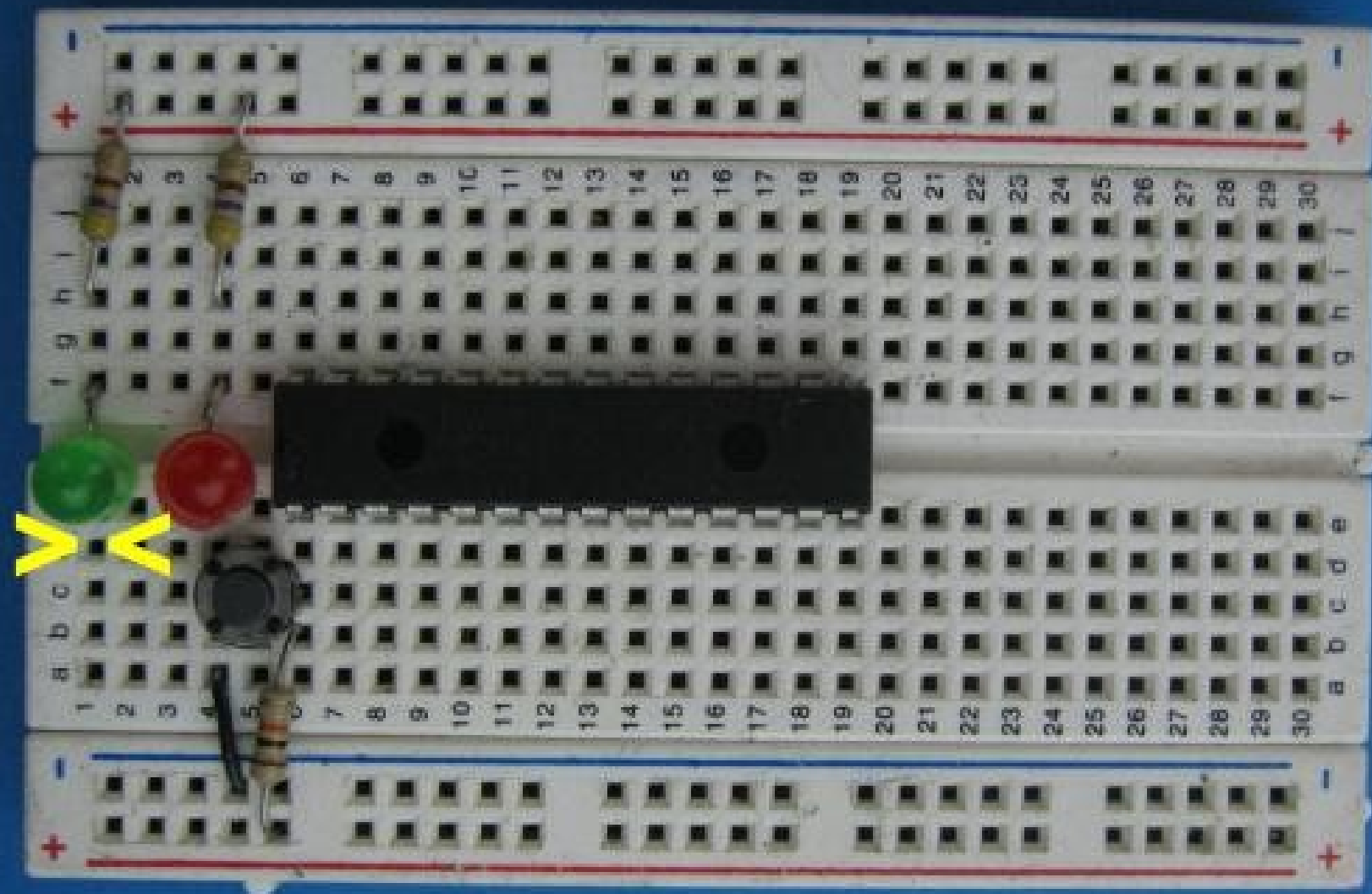
470 ohm (amarillo violeta cafe)



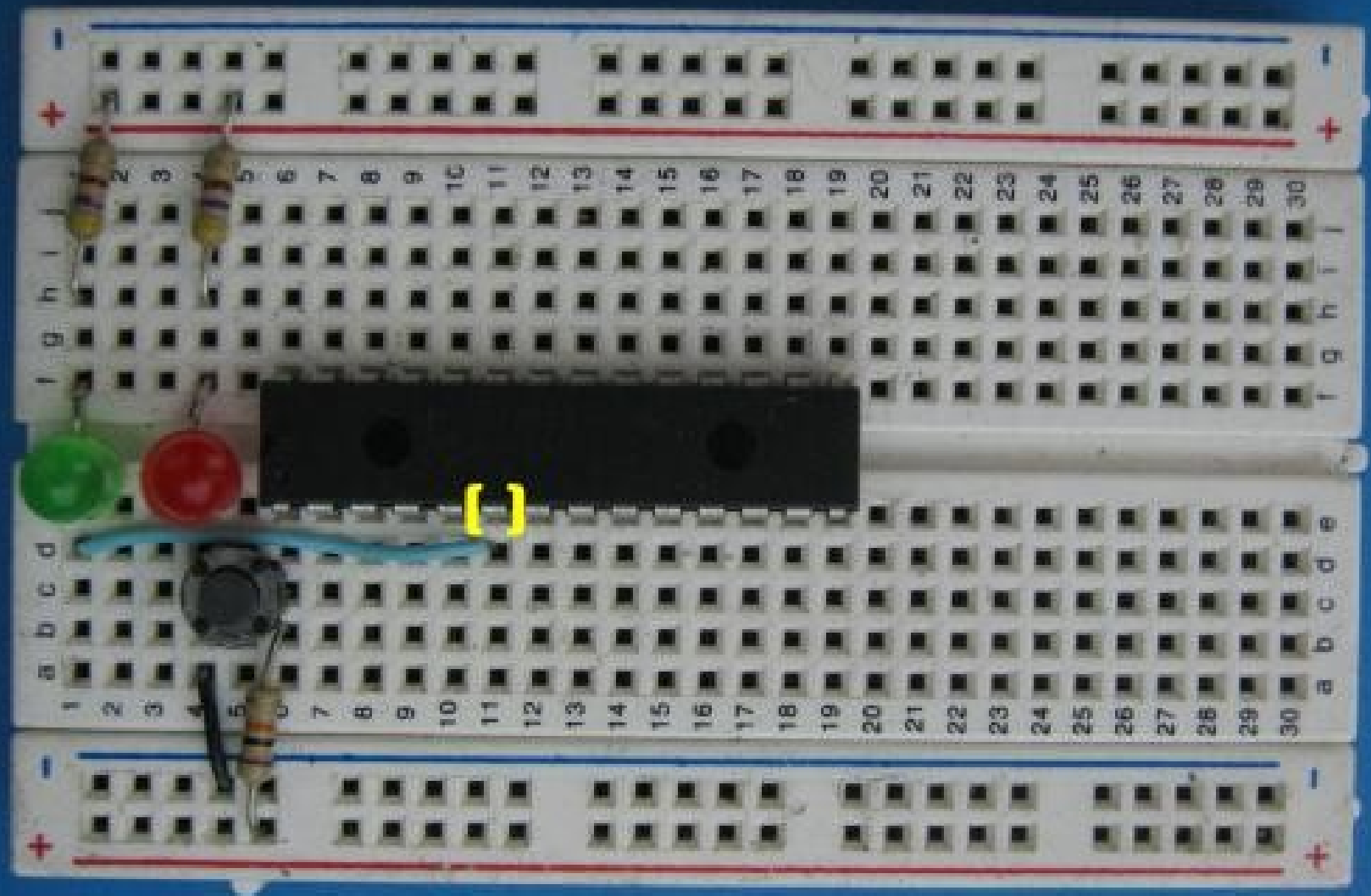
LED DE INDICACION DE RESET



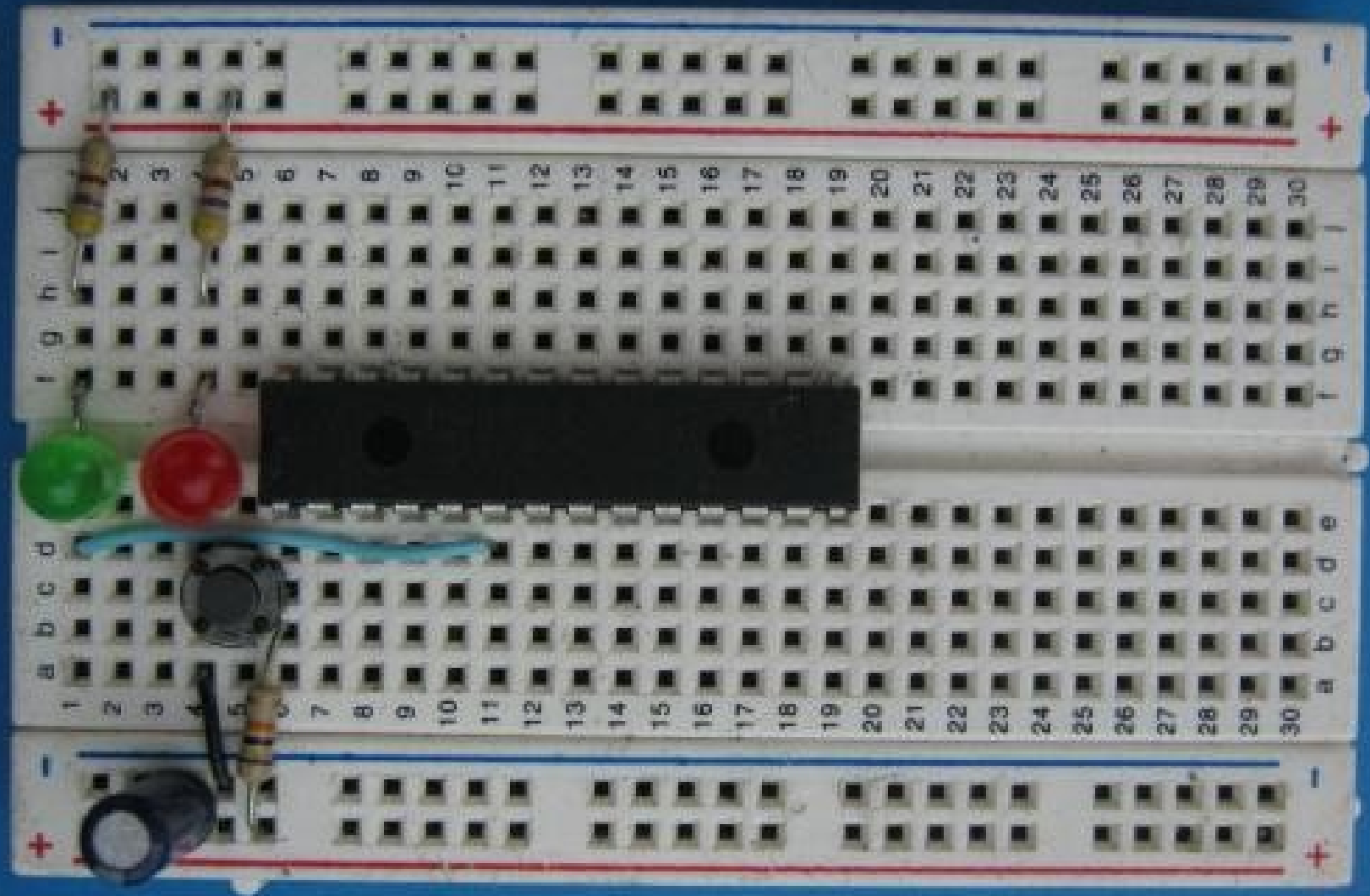
ANODO (PATA LARGA)



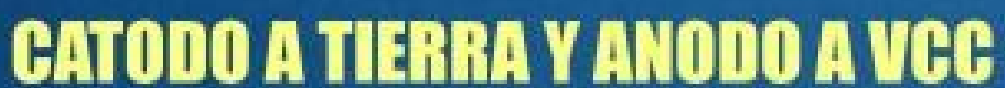
CATODO (PATA CORTA)

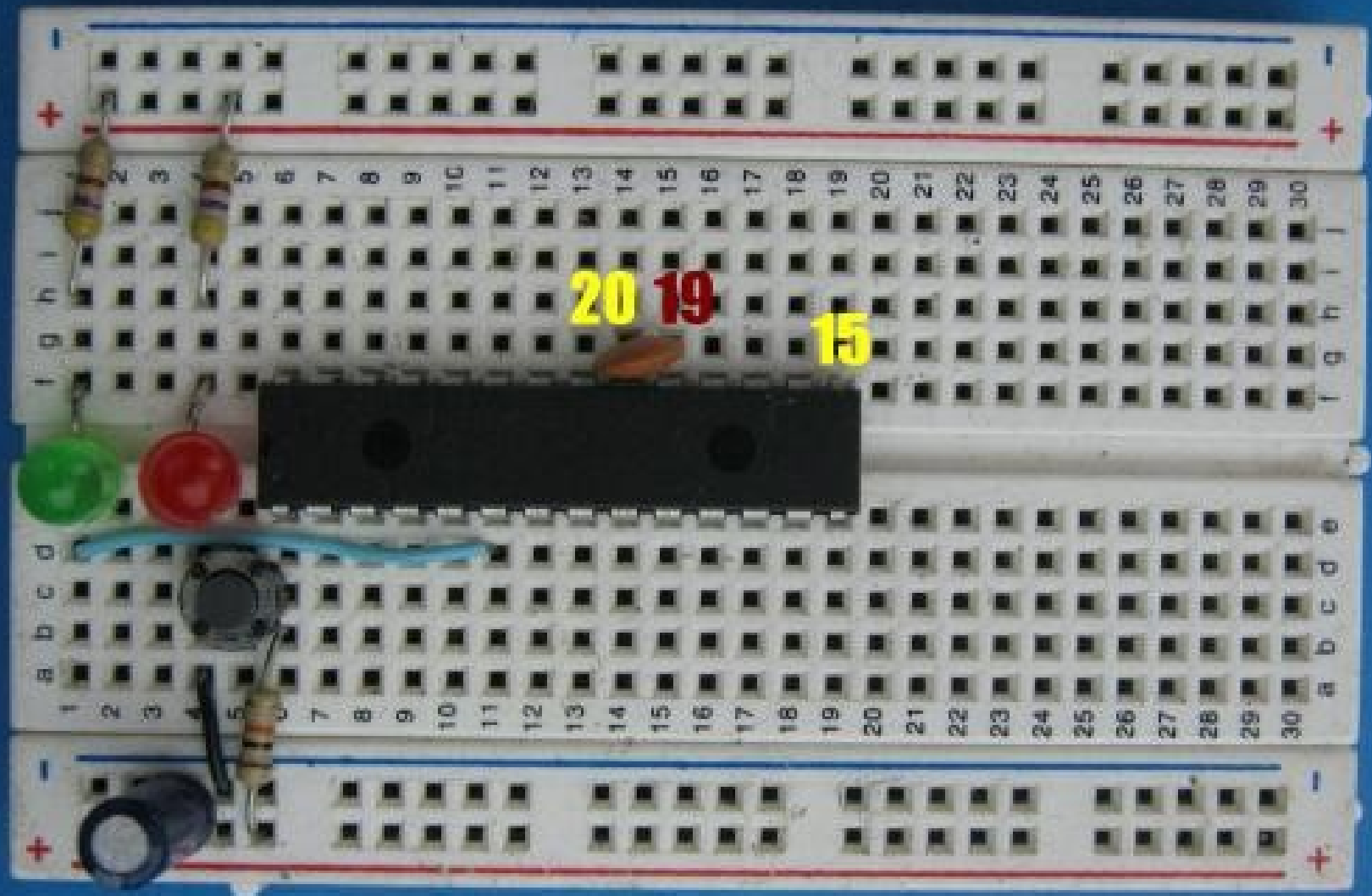


DEL LED AL PIN 6 DEL PIC

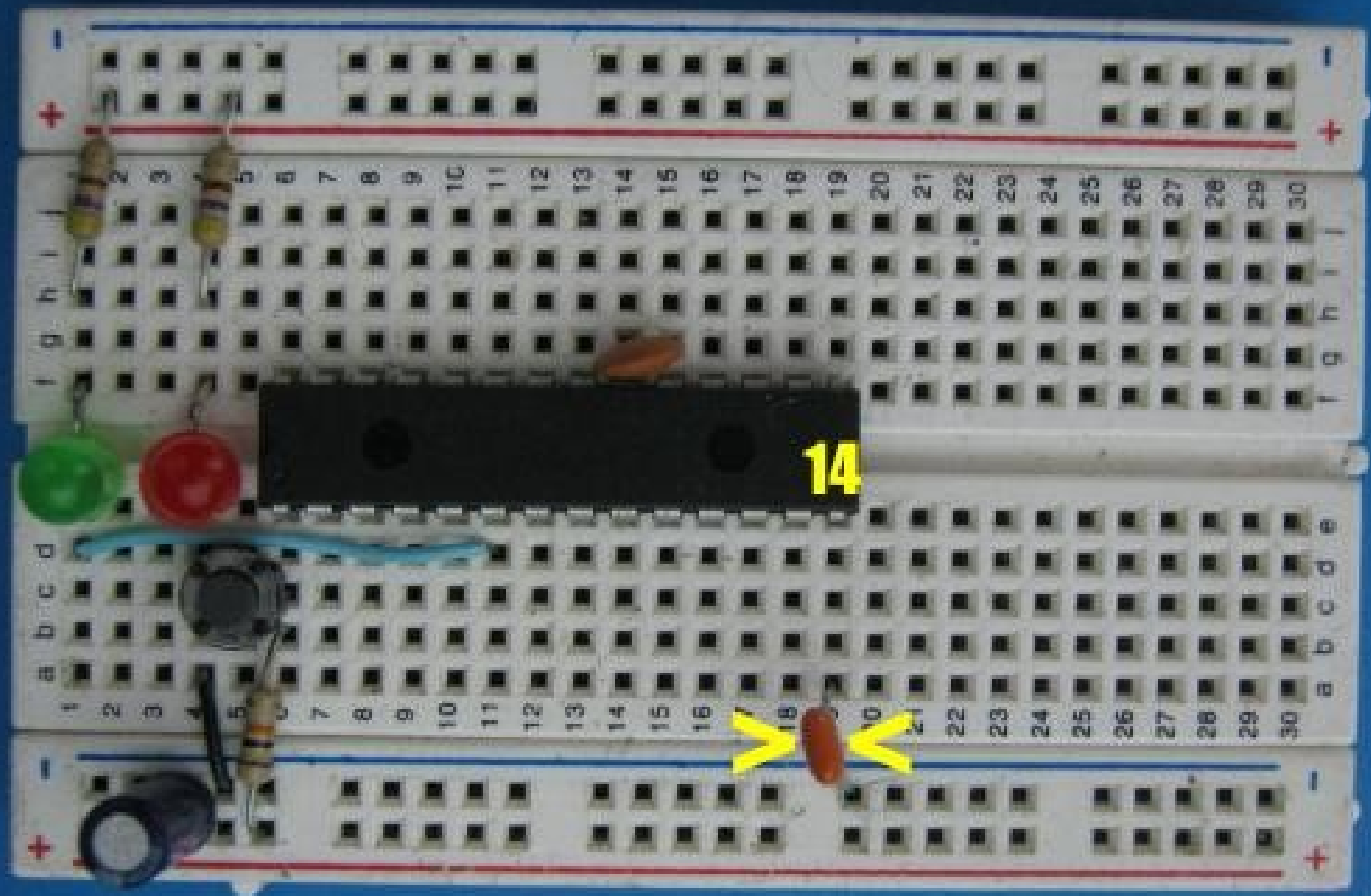


CAPACITOR DE 1U μ F ENTRE TIERRA Y VCC

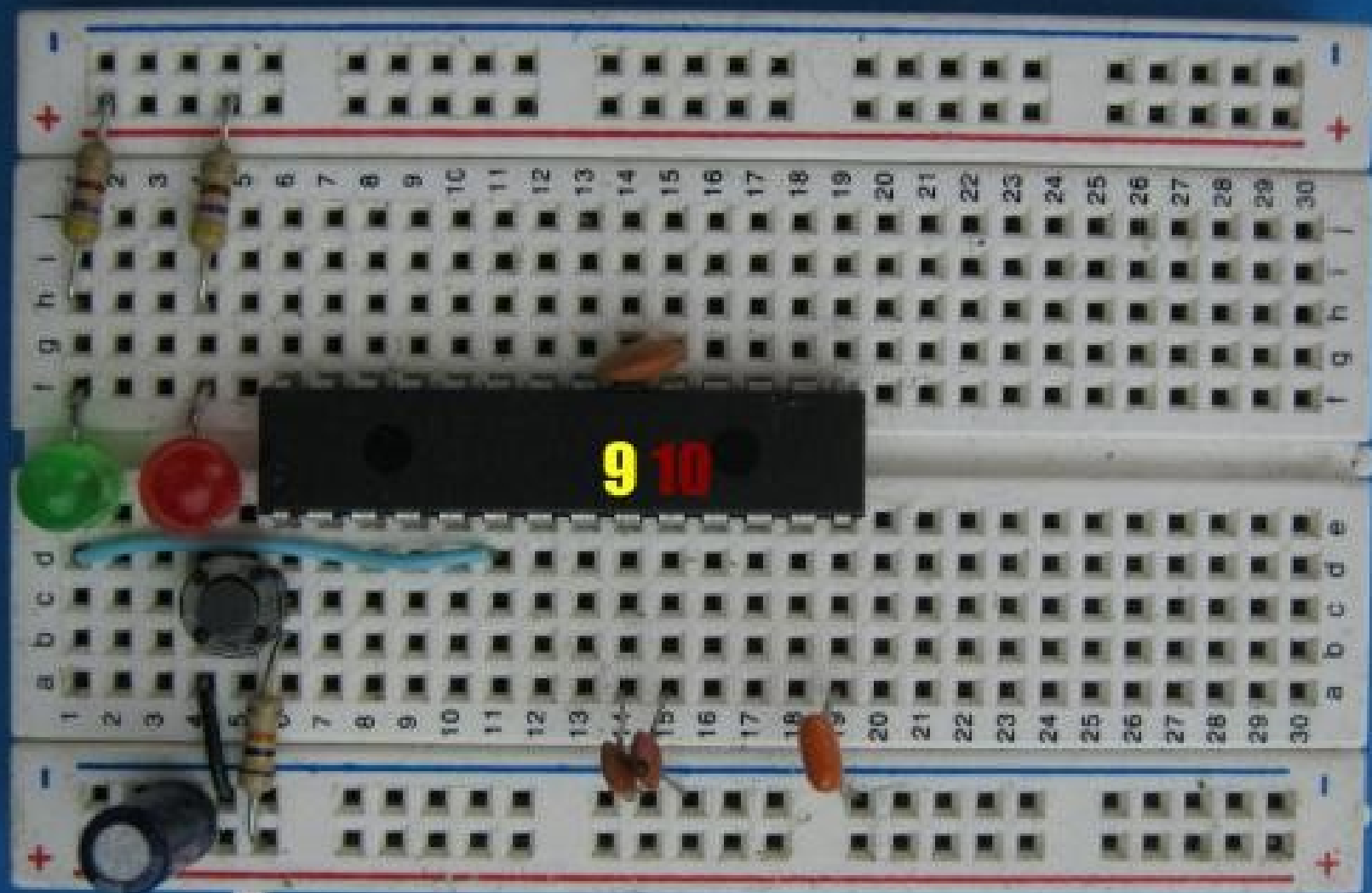




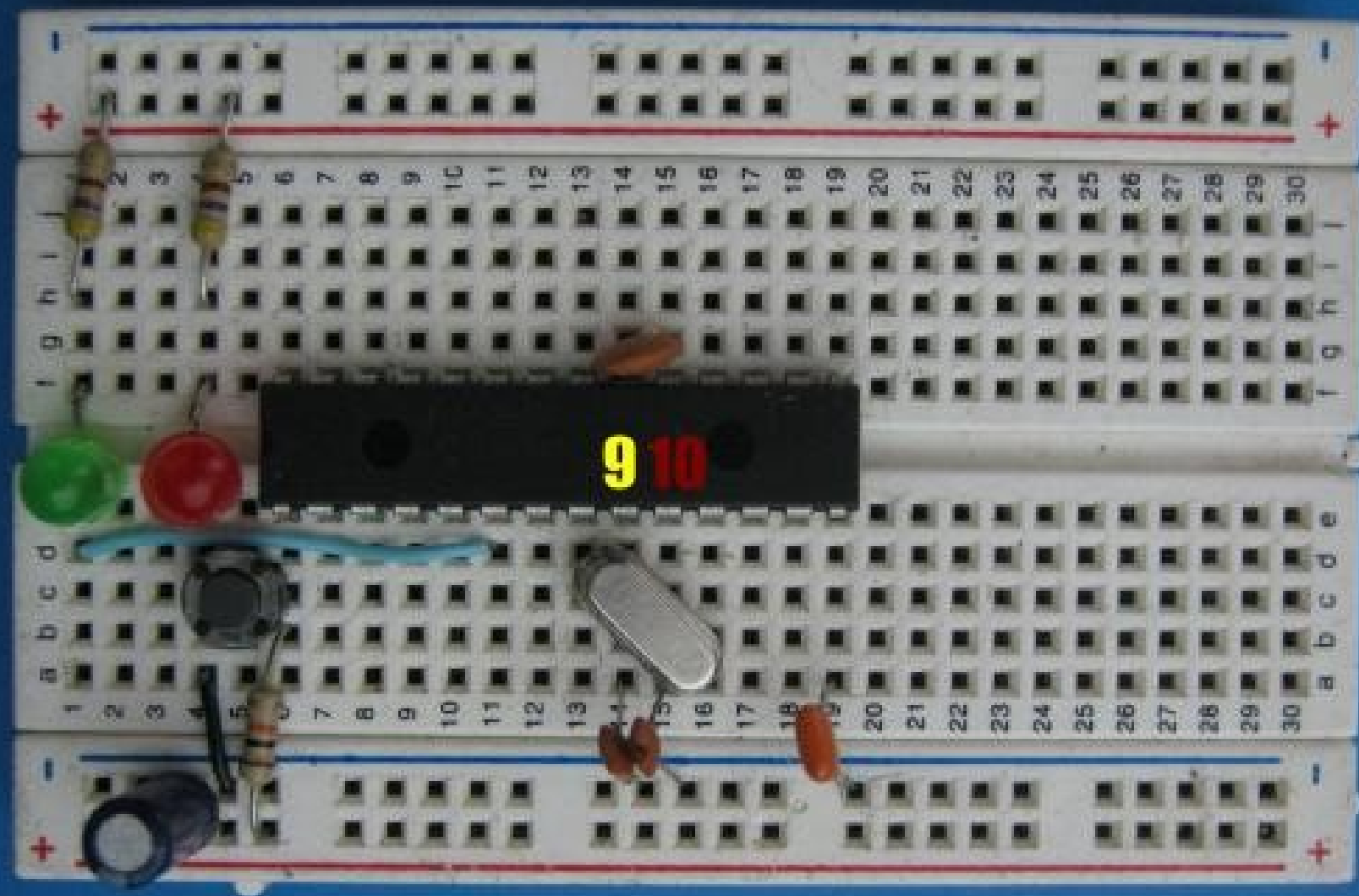
CAPACITOR DE 0.1uF (104) ENTRE LOS PINES 19 Y 20



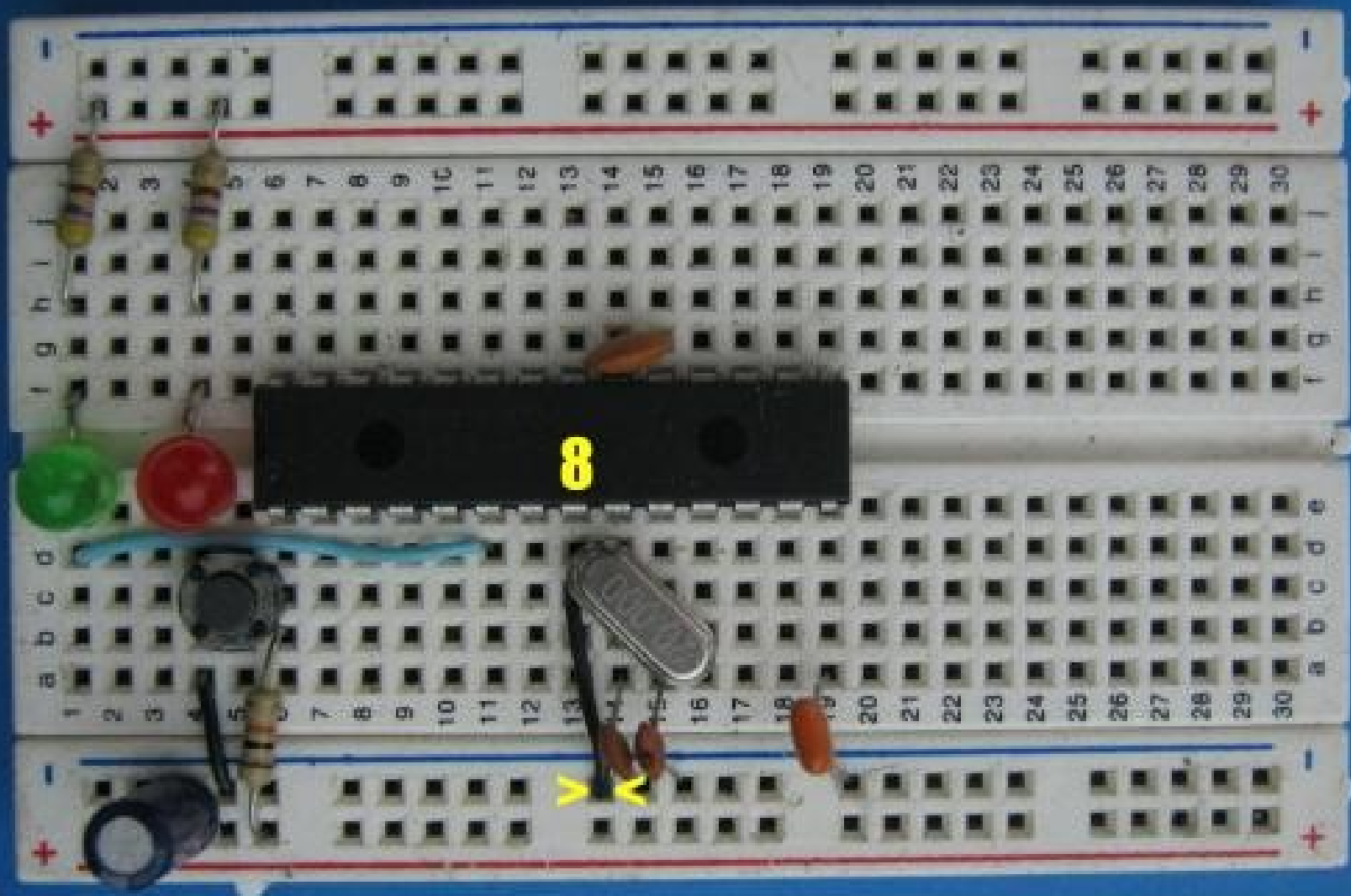
CAPACITOR DE 220nF (224) ENTRE EL PIN 14 Y TIERRA



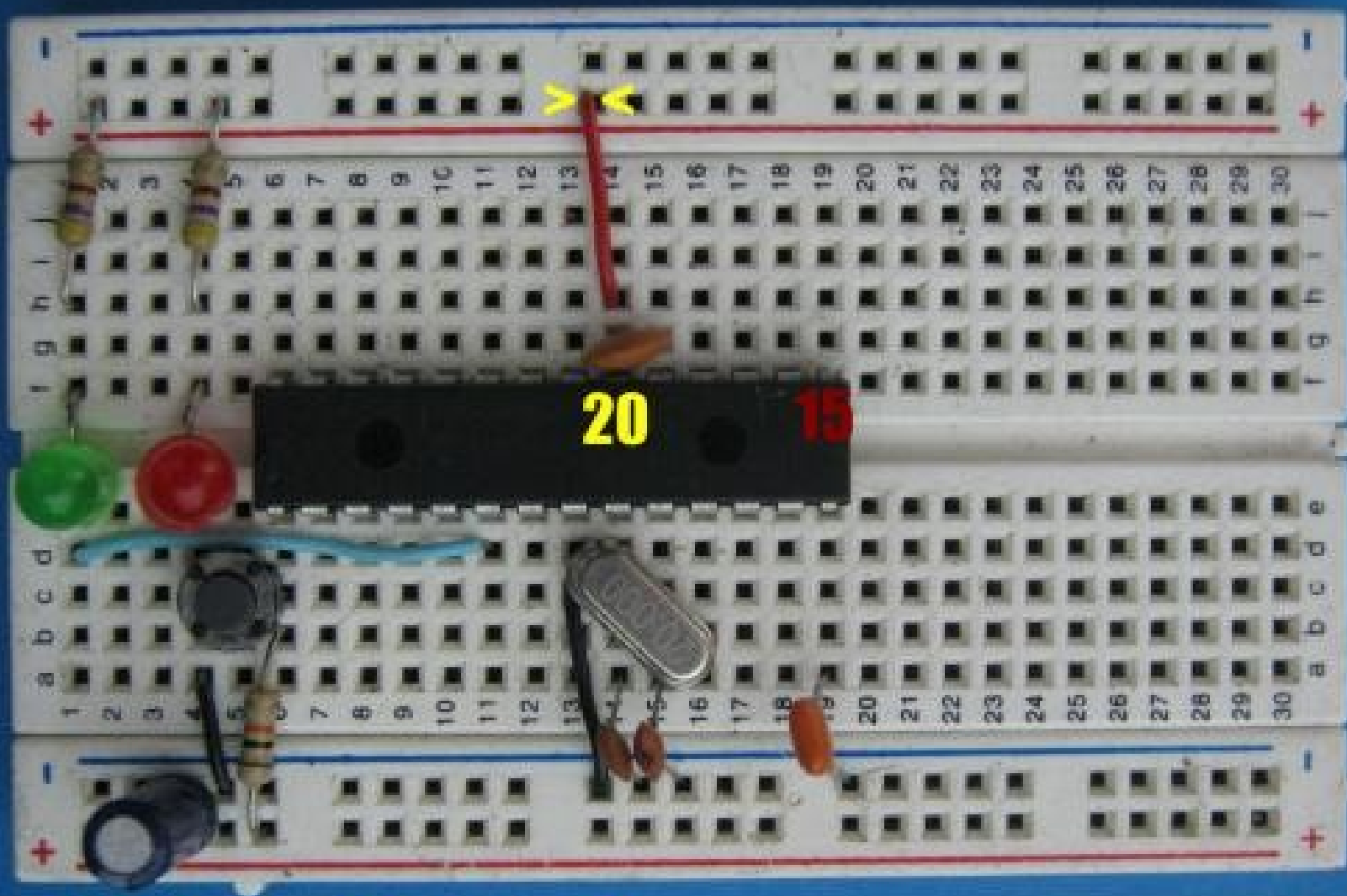
**CAPACITORES DE 22pF (22) DESDE LOS TERMINALES 9 Y 10
A TIERRA**



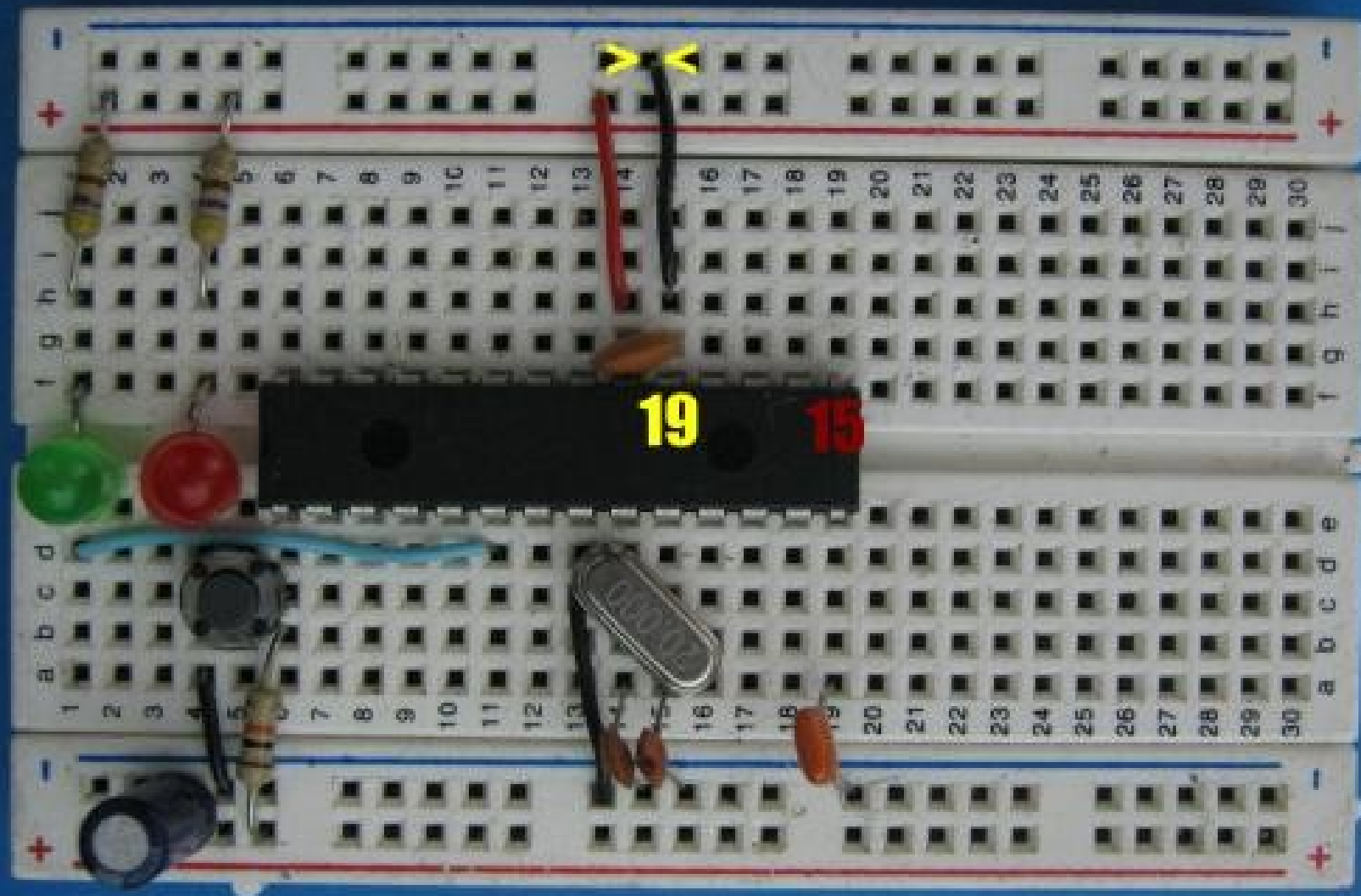
CUARZO DE 20Mhz ENTRE LOS TERMINALES 9 Y 10



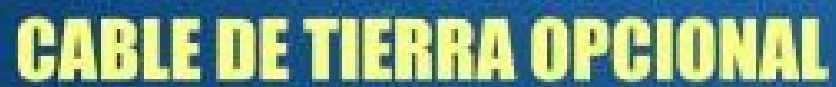
CONECTAR PIN 8 A TIERRA

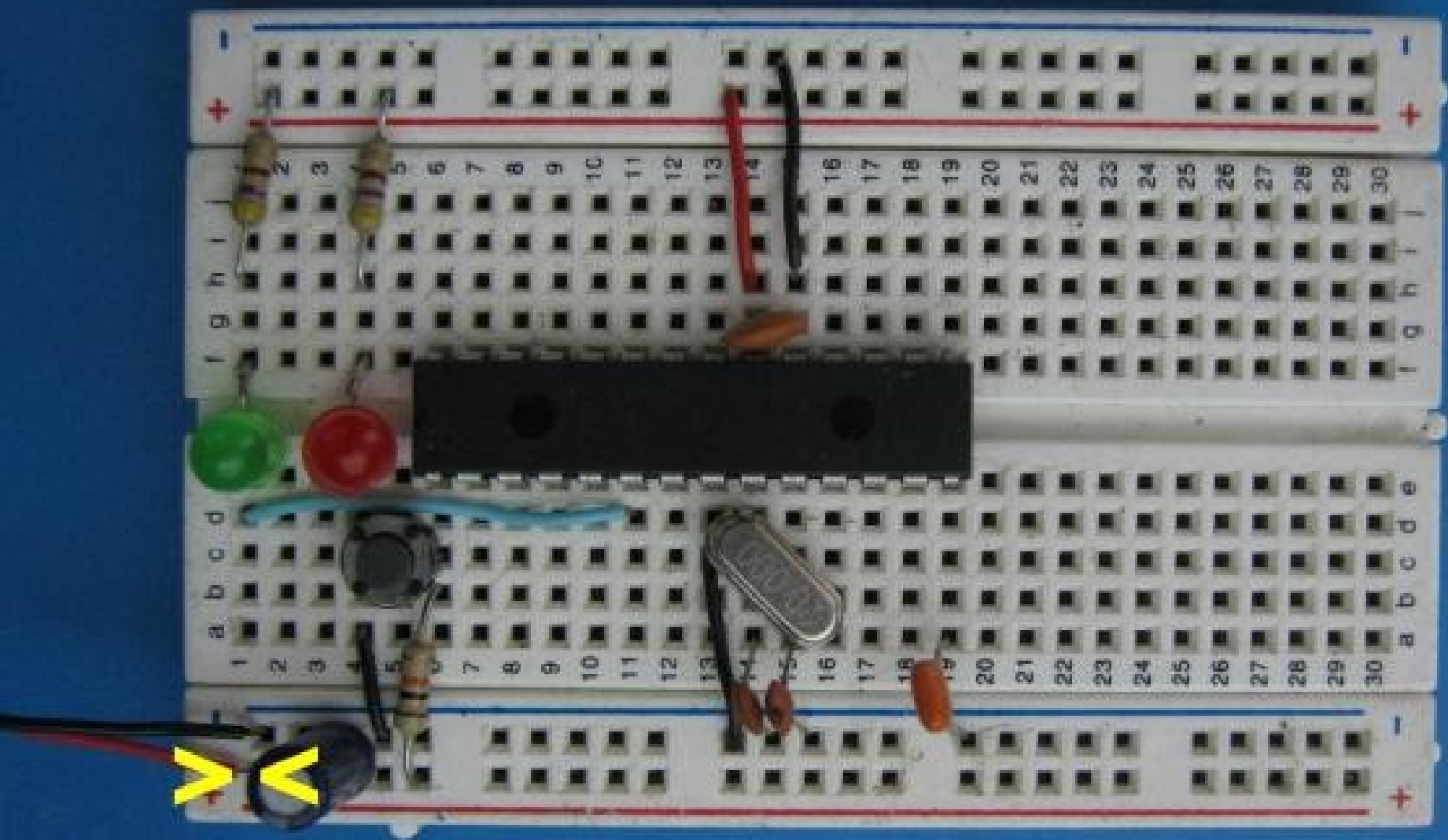


CONECTAR PIN 20 A VCC

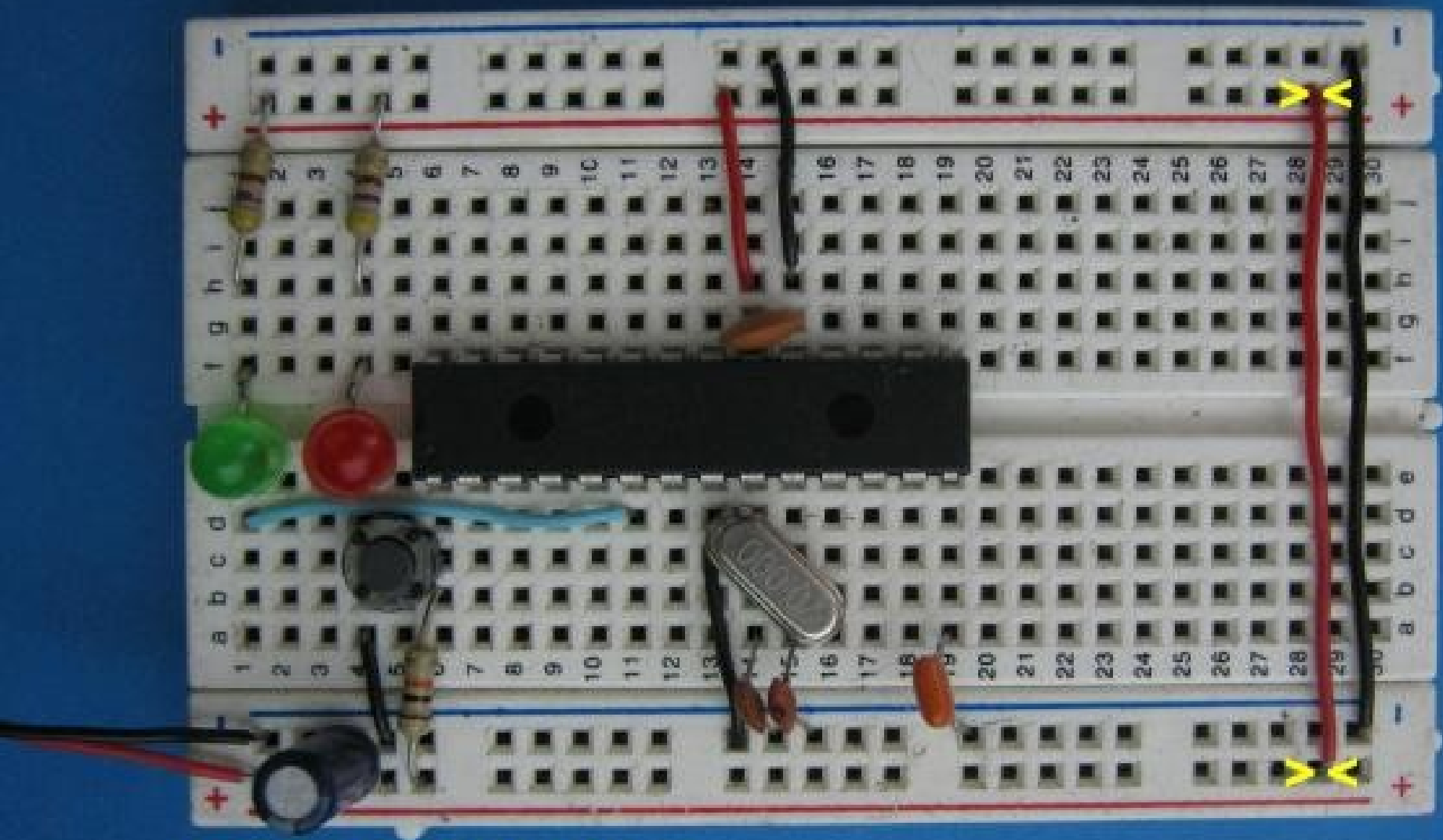


CONECTAR PIN 19 A GND

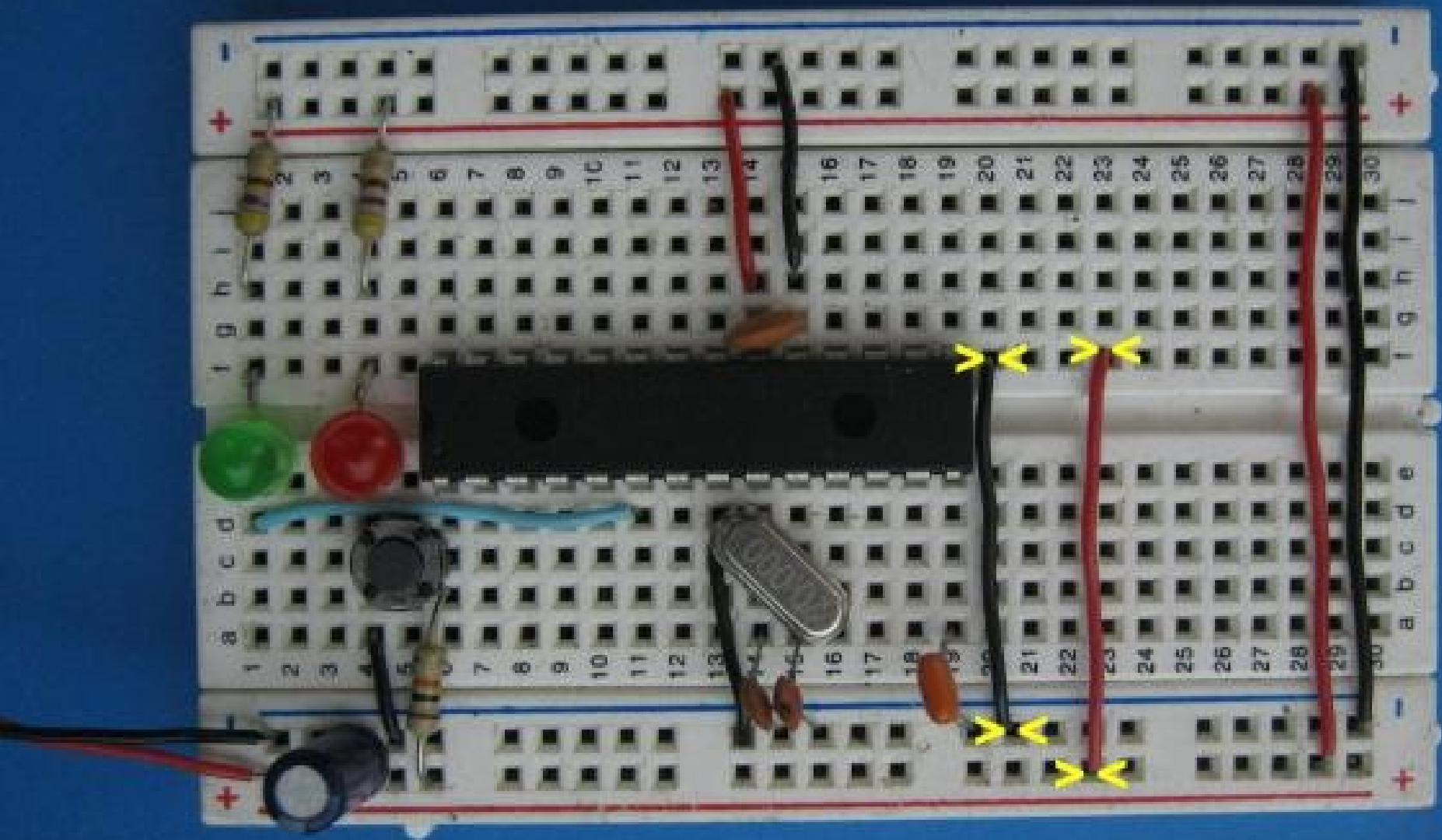




CABLE VCC OPCIONAL

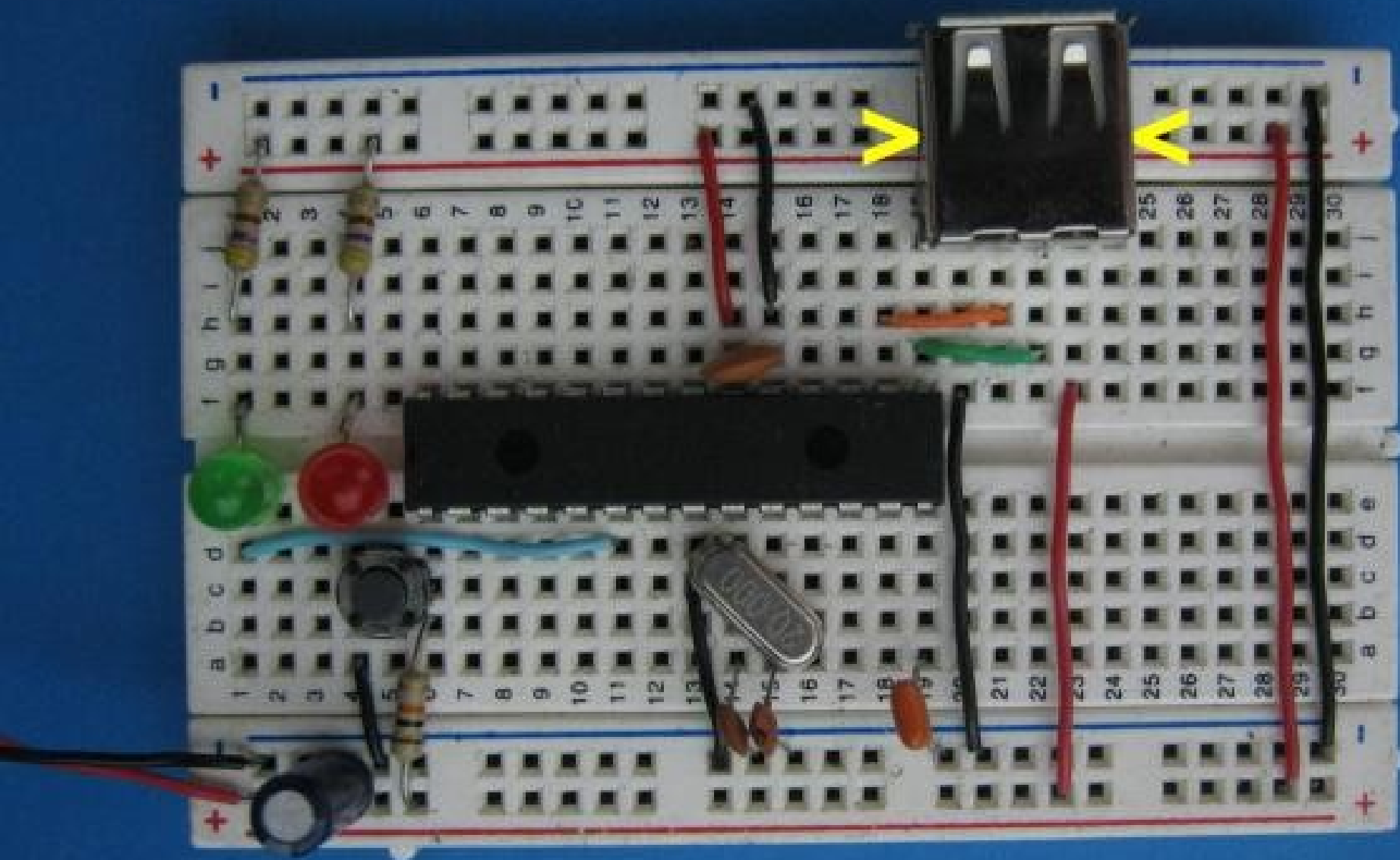


INTERCONECTAR VCC



CABLES DE ALIMENTACION PARA EL PUERTO USB





CONECTOR USB HEMBRA



LED DE PRUEBA

**RESISTENCIA DE 330 ohm (NARANJA NARANJA CAFE)
ANODO (PATA LARGA) CATODO(PATA CORTA)**



OBSERVACIONES

ANODO

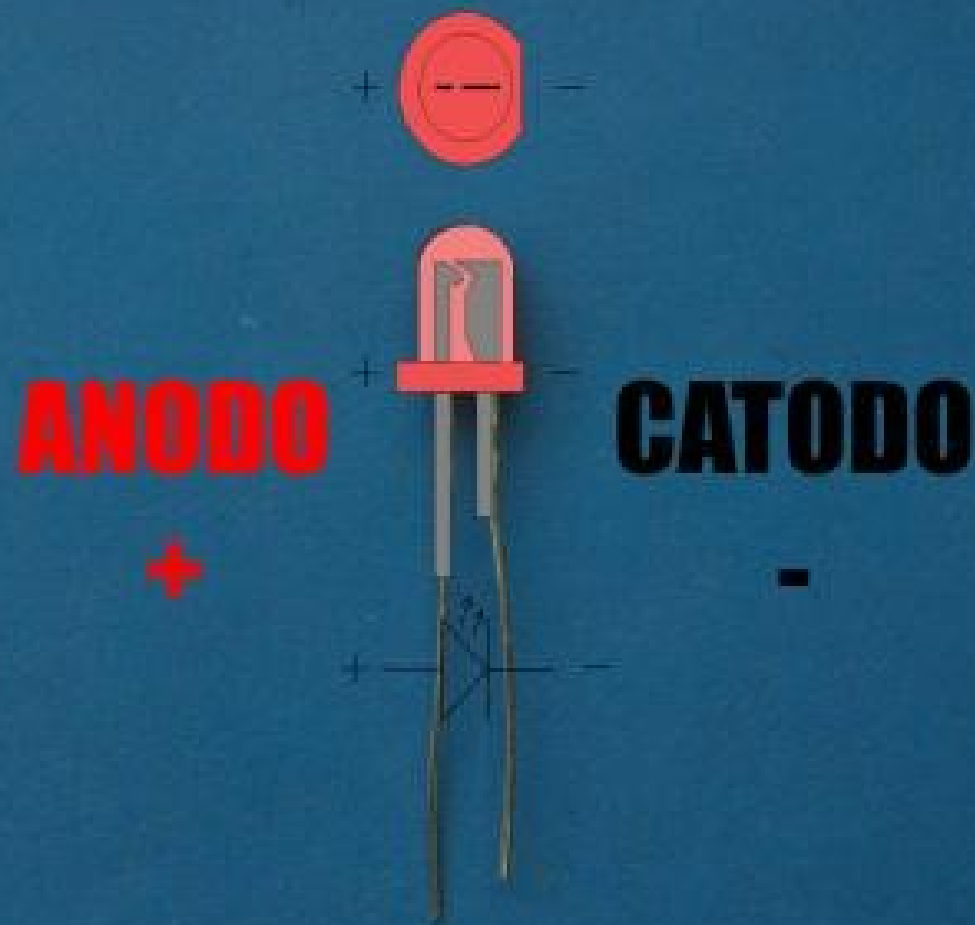
+



CATODO

-

TERMINALES DEL LED

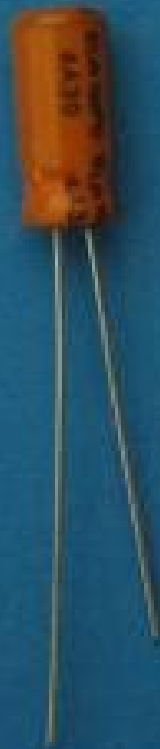


TERMINALES DEL LED

TERMINALES CAPACITOR

CATODO

+



ANODO

-

**EL CATODO TAMBIEN SE IDENTIFICA POR LA
FRANJA NEGRA**



TERMINALES CONECTOR USB HEMBRA



LOS COLORES CORRESPONDEN CON EL DEL MONTAJE

TERMINALES EXTENSIÓN USB MACHO



GND

D+

D-

VCC (+5V)