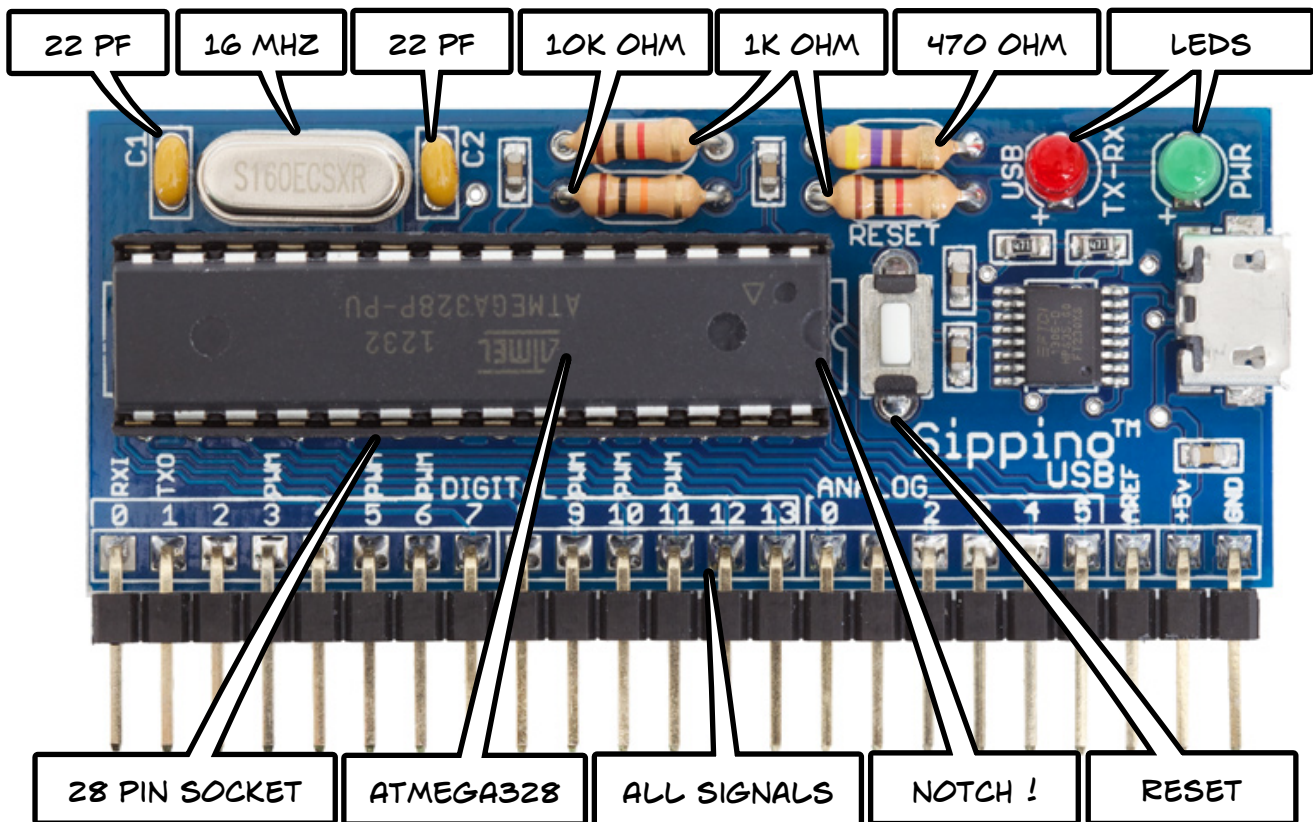


SIPPINO USB

INSTRUCTIONS



BUILD INSTRUCTIONS:

1. BEND ALL RESISTORS LEADS CLOSE TO THE RESISTOR BODY. INSERT INTO PCB AND SOLDER IN PLACE. TRIM LEADS.
NOTE: R2 10K OHM (BROWN-BLACK-ORANGE), R1 AND R4 1K OHM (BROWN-BLACK-RED) AND R3 470 OHM (YELLOW-PURPLE-BROWN).
2. INSERT AND SOLDER LEDS. TRIM LEADS.
NOTE: LONG LEAD GOES INTO THE HOLE MARKED +.
3. INSERT BOTH 22 PF CAPACITORS INTO HOLES MARKED C1 AND C2. SOLDER AND TRIM LEADS. INSERT, SOLDER AND TRIM LEADS ON 16MHZ CRYSTAL.
4. INSERT SOCKET INTO THE PCB. THE NOTCH MUST MATCH THE NOTCH PRINTED ON THE PCB. INSERT THE RESET BUTTON. SOLDER SOCKET AND BUTTON.
5. AS REQUIRED INSERT AND SOLDER ON THE PIN HEADERS.
6. GENTLY STRAIGHTEN LEGS ON THE ATMEGA328. INSERT INTO THE 28 PIN SOCKET. NOTE: THE NOTCH MUST MATCH THE NOTCH PRINTED ON THE PCB AND THE NOTCH ON THE SOCKET.

USAGE:

1. IF REQUIRED, INSTALL FTDI VCP FT230X DRIVERS ON YOUR COMPUTER.
2. IN THE ARDUINO IDE; CHOOSE ARDUINO DUEMILANOVE W/ATMEGA328 AS THE BOARD AND FTDI CHIP AS THE SERIAL PORT.
3. THE SIPPINO USB IS NORMALLY POWERED FROM THE COMPUTER'S USB PORT. IT CAN ALSO BE POWERED BY APPLYING + 5 VOLTS TO THE +5V PIN OR WITH A 5 VOLT USB AC ADAPTOR AND MICRO USB CABLE. **NOTE:** YOU SHOULD NOT CONNECT AN EXTERNAL POWER SOURCE WHILE THE SIPPINO IS CONNECTED TO THE COMPUTER'S USB PORT!