

Abstract geometric lines in the top left corner, consisting of several overlapping, irregular polygons and lines in a light beige color.

MORSE CODE PRACTICE KIT

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GENERAL INFO

- This device can be used for coding and decoding Morse code.

- Code sending process

ASCII code input is received by the module, converted into Morse code, and then converted into audio signal.

- Code receiving process

It converts the received audio signal into Morse code, and then convert it into ASCII code and displays it.



SIMULATION

Done using WOKWI – Online simulator

DESIGNS

Altium Designer and Solidworks

MANUFACTURING

JLCPCB and 3D Printing

ASSEMBLY

Hand soldered and Assembled by hand

SIMULATION

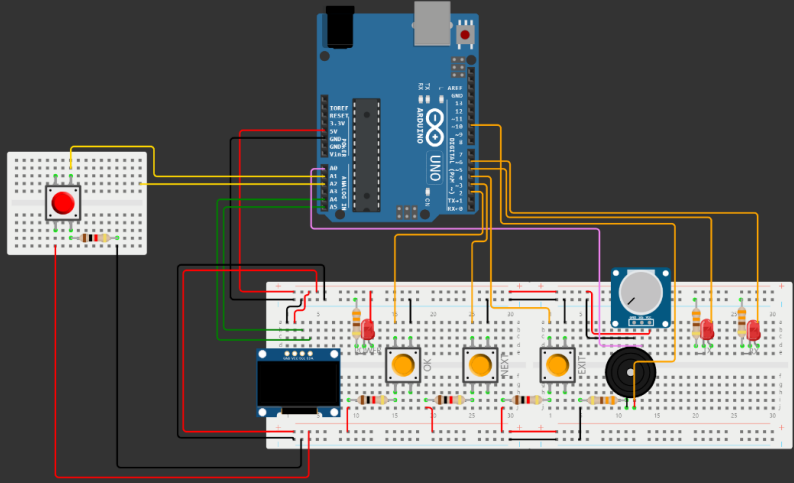
WOKWI SAVE SHARE MorseCED_test Docs

sketch.ino diagram.json libraries.txt Library Manager

```
1 #include <Wire.h>
2 #include <Adafruit_GFX.h>
3 #include <Adafruit_SSD1306.h>
4 #include <avr/pgmspace.h>
5
6 #define PB_OK 2
7 #define PB_NEXT 3
8 #define PB_CANCEL 4
9 #define TX 5
10 #define RX 6
11 #define BUZZER 10
12
13 #define ButtonDebounceTime 200
14
15 int POT = analogRead(A0);
16 //int DATA = analogRead(A1);
17
18 // Set up variables
19 const int analogPin = A1;
20 bool end_rx = false;
21 int last_pos_x = 0;
22 int last_pos_y = 16;
23 ///////////////////////////////////////////////////
24
25 char Letters[27] = "ABCDEFGHIJKLMNOPQRSTUVWXYZ_";
26
27 // Array holding all Morse code letter dot dash combinations
28
29 const PROGMEM char MorseCode[26][6] = {
30   { '.', '-', 'x', 'x', 'x', 'A' },
31   { '-', '.', '.', '.', 'x', 'B' },
32   { '-', '.', '-', '.', 'x', 'C' },
```

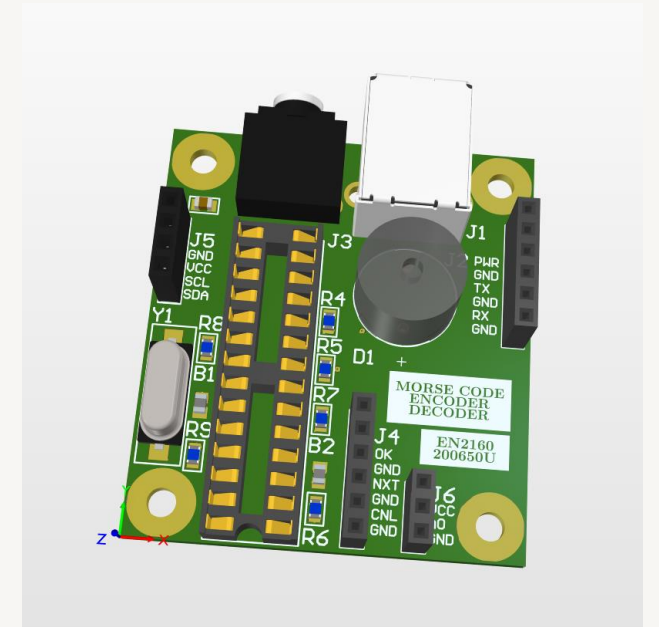
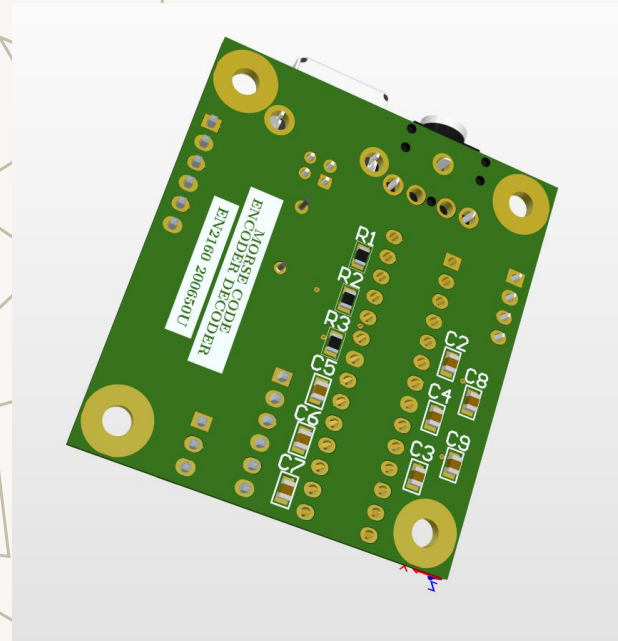
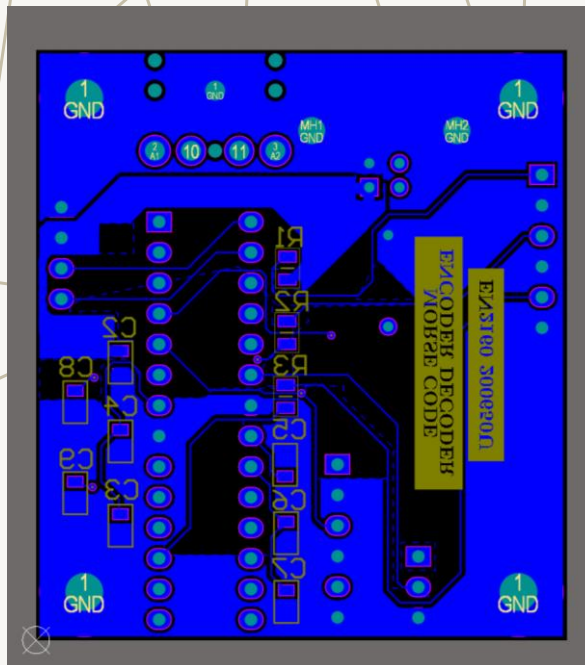
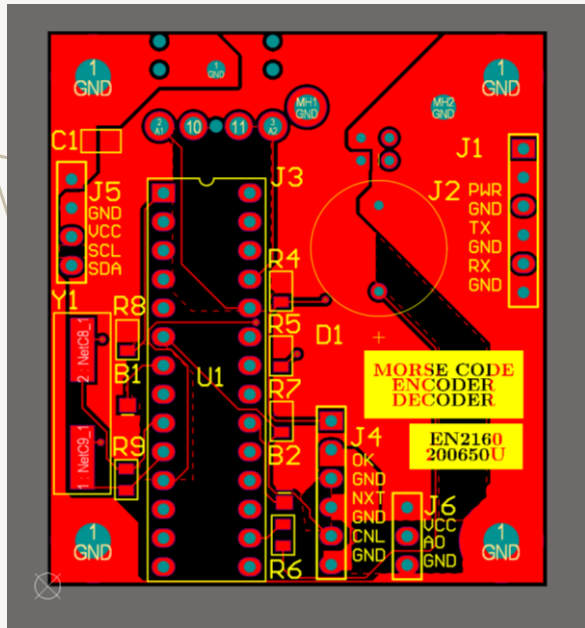
Simulation

▶ + ⋮

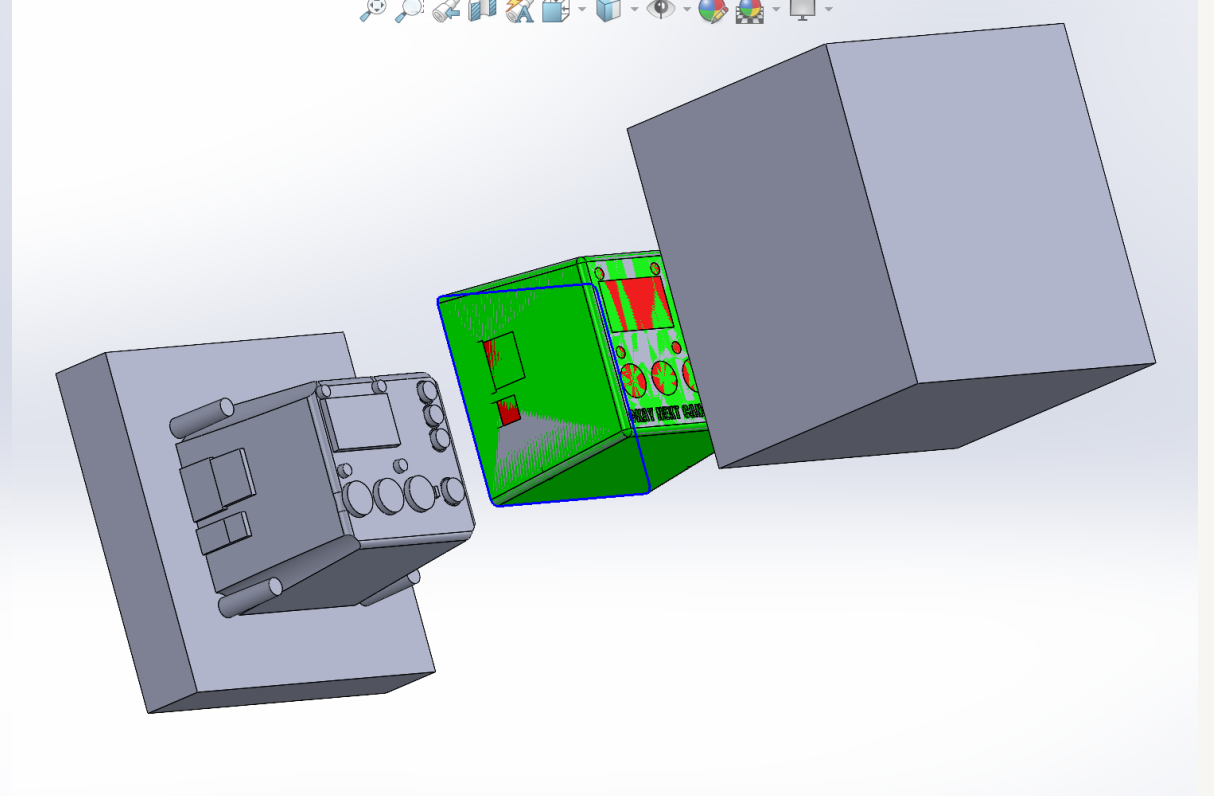
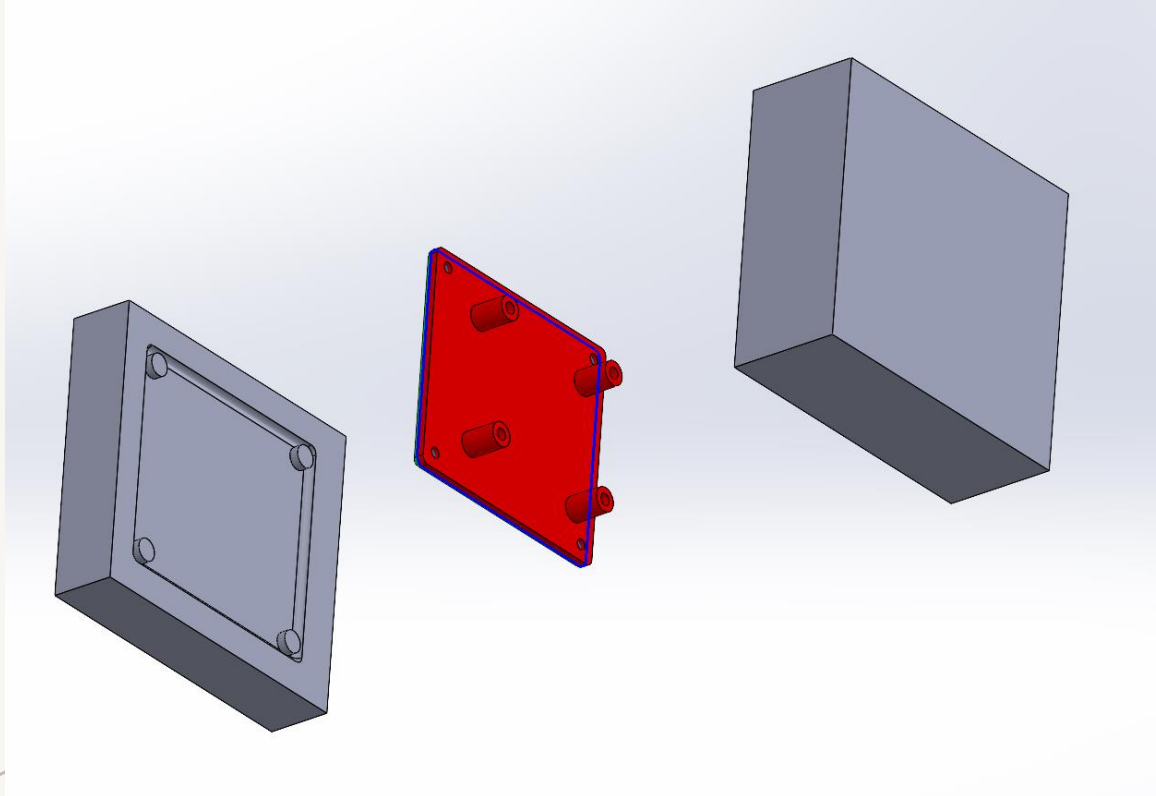


1	2	3	4
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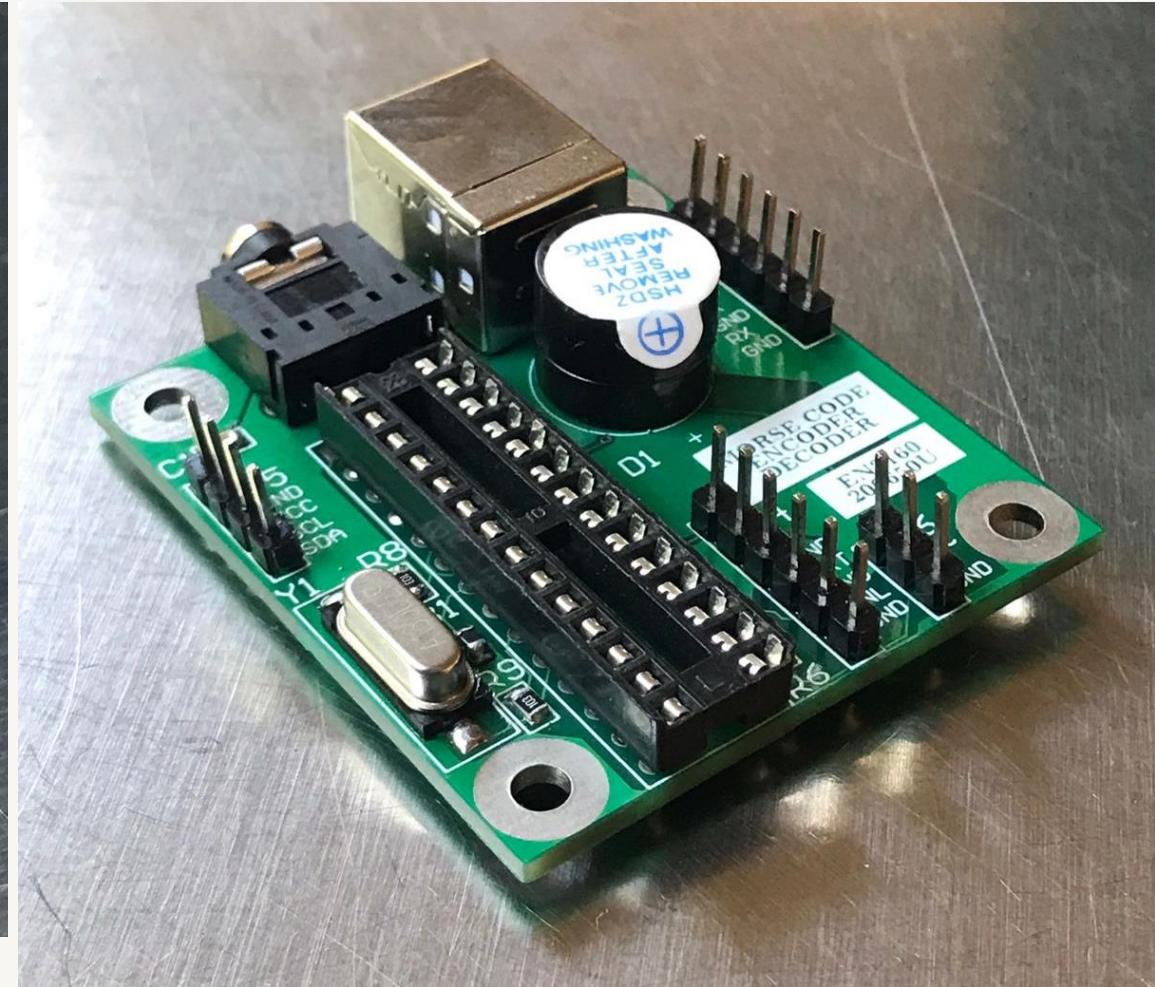
PCB DESIGN



ENCLOSURE



PCB ASSEMBLY





THANK YOU

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