

PORTABLE OSCILLOSCOPE



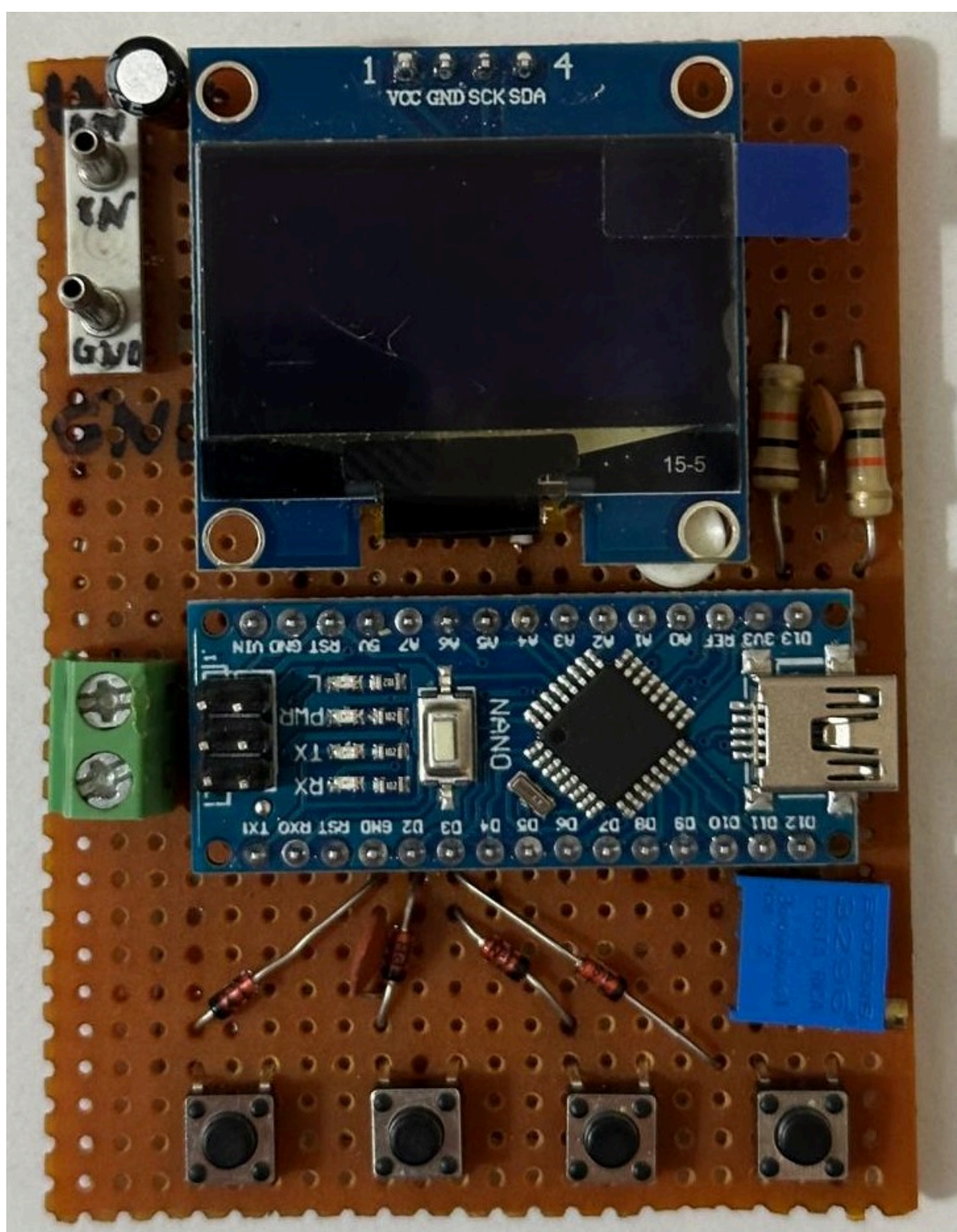
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Abstract

In this project, I designed a compact version of the oscilloscope. Considering the large size and portability problems of traditional oscilloscopes, the device was provided to display waveform, frequency and amplitude information simultaneously on a small OLED screen. In this way, users can always carry the oscilloscope with them and make measurements quickly when needed. The project increased portability, while also considering ease of use and efficiency.

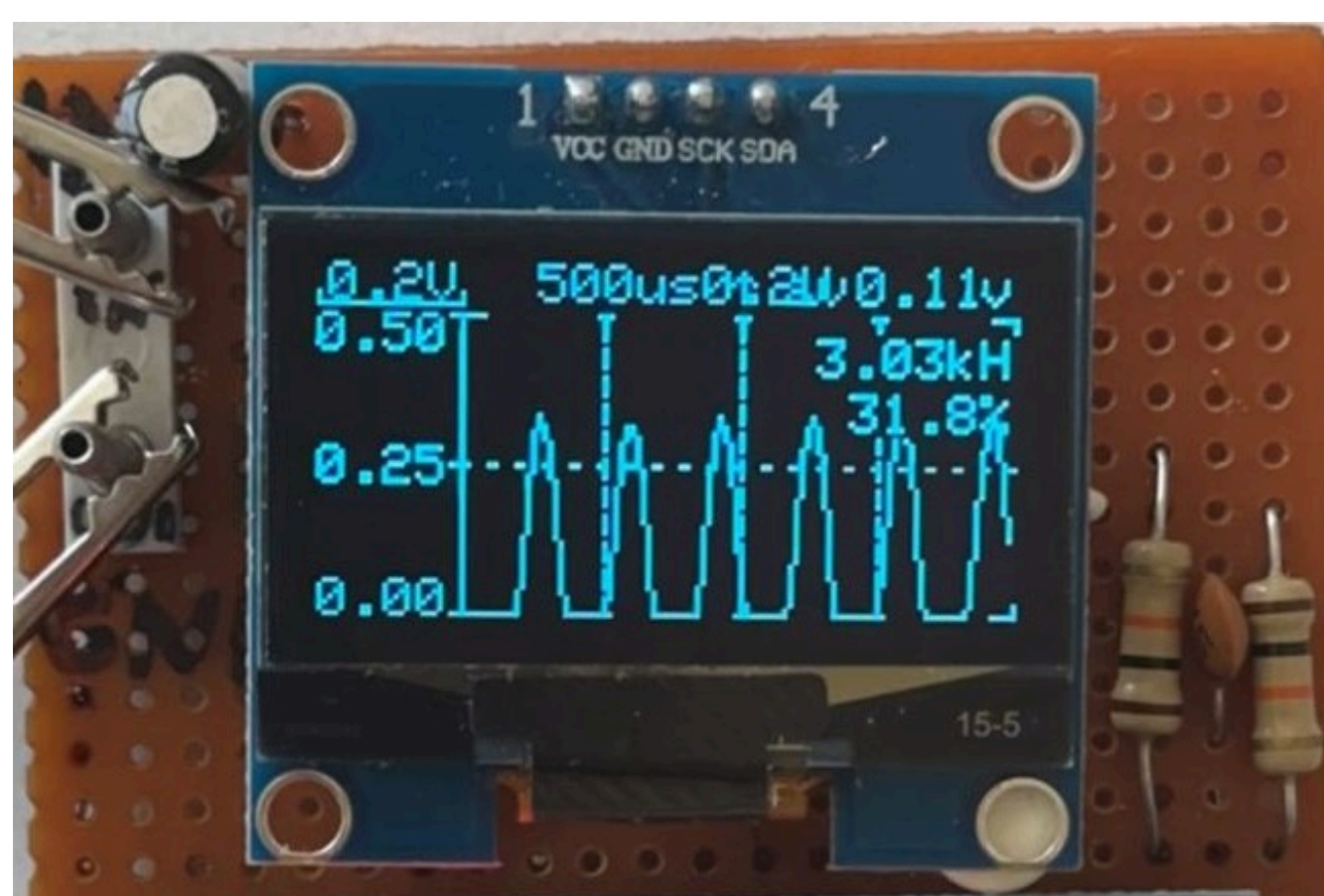


Purpose of This Project

This project offers a portable oscilloscope solution that can measure up to 20 kHz as an alternative to traditional oscilloscopes that are difficult to carry in tight spaces and harsh conditions. Thanks to its small size, users can always carry the device with them and quickly and easily view signals when needed. This design prioritizes portability and ease of use, providing a practical and efficient measurement experience.

Main Components

- Arduino Nano
- Arduino OLED Display
- 4 Buttons
- Resistors
- Diode
- Capacitors
- Breadboard
- Connecting Wires



Conclusion

This portable oscilloscope is a compact device that can measure up to 20 kHz, allowing fast and efficient measurements in tight spaces and difficult conditions. Its small size, portability and ease of use make it a practical solution for electronic measurements.