

Visualisation of Audio using Dot Matrix Display

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Abstract

From simple music player to concerts, audio visualization enhances the overall experience of the enjoyer. In this project we try to visualize a audio signal by plotting its composite frequency and its amplitude in a 8*4 dot matrix display. This is achived by taking fourier transform of small chunks of audio signal using Fast Fourier Transform. The resulting frequency and amplitude are scaled down and applied to some functions that changes the overall waveform and is displayed in dot matrix display.

Implementation

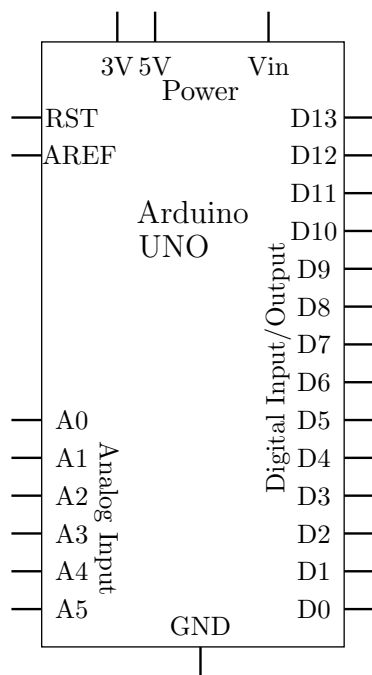
Introduction

dfdsfsas

Block Diagram

dggds

Arduino UNO



Hardware

dfaskfas

Program

```
void setup () {  
    pinMode(12, LOW);  
}  
  
void loop () {  
  
}
```

Conclusion

dfakf