**INMP441 Microphone Sensor**

**Key Features**

1. **I2S Communication**: Ideal for efficient data transfer in audio applications  
   .
2. **Applications**: Perfect for **sound detection** projects.
3. **Low Power Consumption**: Uses only **1.4 mA of power**.
4. **Wide Frequency Response**: Delivers clear sound without distortion from **60 Hz to 15 kHz.**
5. **Excellent Power Supply Rejection(PSR)**: Minimizes noise from the power supply, rated at **-75 dBFS**.
6. **Good Signal-to-Noise Ratio**: Provides a clear audio signal with a SNR of **61 dBA**.

A screen shot of a graph

Description automatically generated

Time domain (In Arduino serial plotter)

A screenshot of a computer

Description automatically generated

Frequency domain (Python)

A screen shot of a computer

Description automatically generated

Frequency domain-Top 3 frequencies (Python)

A screenshot of a computer

Description automatically generated

Top3 Frequencies and its amplitude in serial port