**Test Procedure for microphone testing**

The microphone that we are using here is adafruit SPH0645 mems digital microphone.

For testing this microphone with the teensy 4

1. We have to wire up the sensor with the teensy board.



Pin connection

Mic 3V - board 3V

GND - GND

BCLK - pin 21

LRCL - pin 20

DOUT- pin 8

SEL - GND

Test Program

#include <Audio.h>

AudioInputI2S input;

// AudioInputI2SQuad input;

AudioAnalyzeFFT1024 fft;

AudioConnection connection(input, 0, fft, 0);

void setup() {

AudioMemory(50);

}

// copied from the fft example:

void loop() {

float n;

int i;

if (fft.available()) {

// each time new FFT data is available

// print it all to the Arduino Serial Monitor

Serial.print("FFT: ");

for (i = 0; i < 20; i++) {

n = fft.read(i);

if (n >= 0.001) {

Serial.print(n, 3);

Serial.print(" ");

} else {

Serial.print(" -- "); // don't print "0.00"

}

}

Serial.println();

}

}