

Bilag 6 - Arduino-Koden

```
#include <SPI.h>
#include <TimerOne.h>

const long BAUD_RATE = 38400;
const long tSampleInMicros = 10000; // Sample time in microseconds
SPISettings settings(8000000, MSBFIRST, SPI_MODE0);

void setup() {
  SPI.begin();
  Serial.begin(BAUD_RATE); // Initialiserer seriel kommunikation med PC'en
  SPI.beginTransaction(settings);
  pinMode(10, OUTPUT);
  digitalWrite(10, HIGH);
  Timer1.initialize(tSampleInMicros); // initialize timer1, and set the period
  Timer1.attachInterrupt(measureAndSend); // attaches callback() as a timer overflow
  interrupt
}

int getEKGADC()
{
  digitalWrite(10, LOW);
  int result = SPI.transfer16(0x00);
  digitalWrite(10, HIGH);
  return result;
}

void loop() {

}

void measureAndSend()
{
  int adcValue = getEKGADC(); // Udfører AD-konvertering
  Serial.println(adcValue); // Sender data til PC'en
}
```