```
#include <SPI.h>
short X, Y, Z;
float x, y, z;
void L3GD20_write(byte  reg,byte val){
  digitalWrite(10, LOW);
  SPI.transfer(reg);
  SPI.transfer(val);
  digitalWrite(10, HIGH);
}
byte L3GD20_read(byte reg){
  byte ret = 0;
  digitalWrite(10, LOW);
  SPI.transfer(reg | 0x80);
   ret =SPI.transfer(0);
  digitalWrite(10, HIGH);
  return ret;
}
void setup () {
  digitalWrite(10, HIGH);
  pinMode(10, OUTPUT);
  SPI.begin();
  SPI.setBitOrder(MSBFIRST);
  SPI.setDataMode(SPI_MODE3);
  SPI.setClockDivider(SPI_CLOCK_DIV2);
  Serial .begin(115200);
  while (!Serial ) {}
  Serial .println("ms,x,y,z");
  Serial .println(L3GD20_read(0x0f), HEX); // should show D4
  L3GD20_write(0x20, B11001111);
}
void loop () {
  X = L3GD20_read(0x29);
  x = X = (X << 8) | L3GD20_read(0x28);
  Y = L3GD20_read(0x2B);
  y = Y = (Y << 8) | L3GD20_read(0x2A);
  Z = L3GD20_read(0x2D);
  z = Z = (Z << 8) | L3GD20_read(0x2C);
  x *= 0.00875;
  y *= 0.00875;
  z *= 0.00875;
  Serial .print(millis());  Serial .print(",");
  Serial .print(x);  Serial .print(",");
  Serial .print(y); Serial .print(",");
  Serial .println(z);
  delay(5);
}
```