

Hello,

The following Arduino project utilizes the Arduino's digital output pins to produce a simple clock or square wave signal generator. It records the bit signal printing the binary and decimal data inside the Arduino's console terminal. Further examples of implementation can be found under the info button. The file is a lab report where the Arduino was used as a clock signal for a flip-flop rather than utilizing a function generator.

The original code was intended for the Arduino Mega however, it can be adapted to other boards by reassigning the pin variables at the top:

- **int outPort** is the square wave/clock signal output
- **int lsb** stands for the least significant binary bit representing the one's place binary bit
- **int nsb** stands for the none significant binary bit representing the two's place binary bit
- **int msb** stands for the most significant binary bit representing the four's place binary bit

Additionally, the frequency of the pulse can be modified by changing the delays within the first 4 lines. Knowing this the code can also be utilized as a pulse with modulation circuit also known as PWM.