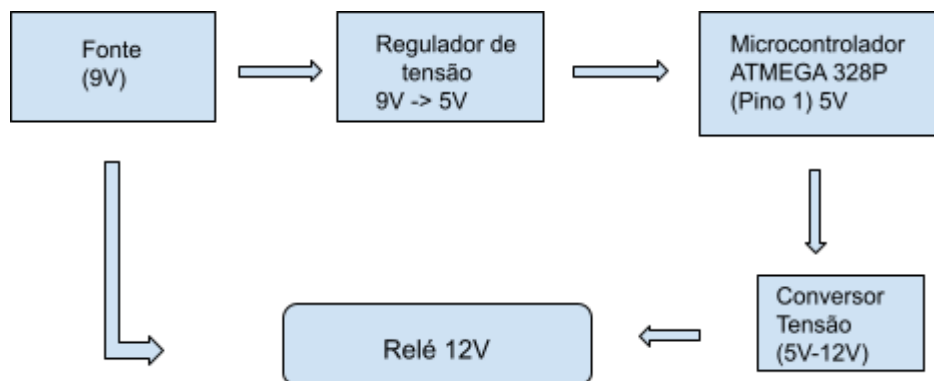**IFPB - Campus Campina Grande**
Professor: Alexandre Vasconcelos
Disciplina: Sistemas Embarcados
Aluno: Lucas Matheus Torres Costa

1. **Diagrama de Bloco**

Circuito Elétrico

Schema EAGLE anexado.

2. **OCR1A = (tempo * f clock) / prescaler**
   OCR1A = 250ms * 16Mhz / 256
   OCR1A = 0.250s * (16*106) / 256
   OCR1A = 15625
   OCR1A = 0011 1101 0000 1001
3.

```
 #include <Arduino.h>

void setup(){
        DDRD = 0b00000100;
}

void loop(){
        PORTD = 0b00000100;
        //delay(delayPeriod);
        PORTD = 0b00000000;
        //delay(delayPeriod);
}
```