## Driver circuit decision table

Before deciding what driver to pick for the led, I decided to create an decision table. The most important factors are weighted against each other resulting in a clear point system. The Nr. With the highest points will be considered the highest priority characteristic/function/behaviour the chip should have.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Nr.** | **Functionality** | **1** | **2** | **3** | **4** | **5** | **6** | **Points** | **Weight factor** |
| **1** | **Dim the led without visible flickering on camera** | - | 1 | 1 | 1 | 1 | 1 | 5 | 5 |
| **2** | **Provide enough power to fully brighten LED** | 0 | - | 0 | 1 | 1 | 1 | 3 | 3 |
| **3** | **Enough brightness levels** | 0 | 1 | - | 1 | 1 | 0 | 3 | 3 |
| **4** | **PWM and digital control** | 0 | 0 | 0 | - | 0 | 1 | 1 | 1 |
| **5** | **PWM only control** | 0 | 0 | 0 | 1 | - | 1 | 2 | 2 |
| **6** | **Highest energy efficiency as possible** | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |

I can conclude that the most important factor is that the led can be dimmed without seeing visible flickering on the camera. Then comes enough power from the driver to power the led and enough brightness levels.

I had expected that PWM and digital control would be more important than only PWM, but later I realised that only PWM is very suitable and I got why I gave it a point against PWM and digital.