1. **Rectifier**
   1. **Diode:** Reverse Voltage 300V min. Current 1A Avg, 10A surge

<https://www.digikey.com/en/products/detail/smc-diode-solutions/FR2GTA/5993216>

<https://www.bourns.com/docs/Product-Datasheets/CD214B-R250_R21000.pdf>

<https://www.digikey.com/en/products/detail/smc-diode-solutions/S2GTR/6022599>

last

* 1. **Capacitor:** 300V (1mF)

<https://www.digikey.com/en/products/detail/kemet/ALF20G102EJ450/8681391>

<https://www.digikey.com/en/products/detail/kemet/ALF20G102EP500/8681394>

1. **Buck Converter**
   1. **Mosfet:**  300V blocking, 2A cont. Current min.

<https://www.onsemi.com/products/discretes-drivers/mosfets/fdd5n50nz>

(high)

<https://www.mouser.com.tr/ProductDetail/ON-Semiconductor-Fairchild/FDD5N50NZTM/?qs=kDD%2FdQe9TTeBFAie%252BCBivg%3D%3D>

(low)

(same mosfet both, we can discard diode below, use mouser link)

* 1. **Inductor:** 300V, 2A min.

<https://www.mouser.com.tr/ProductDetail/EPCOS-TDK/B82615B2202M001/?qs=sGAEpiMZZMv126LJFLh8y6G9bCNb%2F89QTGInlxA0fzI%3D>

* 1. **Diode:** 300V, 2A min.

<https://www.digikey.com/en/products/detail/taiwan-semiconductor-corporation/S4G-V6G/8017559>

<https://www.digikey.com/en/products/detail/taiwan-semiconductor-corporation/S4G-R7G/7358511>

LAST

* 1. **Capacitor:** 25V

<https://www.digikey.com/en/products/detail/nichicon/UVK1V102MHD/2539435>

<https://www.digikey.com/en/products/detail/illinois-capacitor/108RZM035M1325/5410896>

(2nd one)

* 1. **Shunt Resistor:**

<https://www.digikey.com/en/products/detail/stackpole-electronics-inc/CSS0402FT10L0/10719366>

* 1. **Controller**

<https://www.microchip.com/wwwproducts/en/PIC16F1613>

* 1. **Isolated Opamp**

<https://www.mouser.com.tr/ProductDetail/Silicon-Labs/SI8920BC-IP/?qs=bB7QTEcmLuN2VIVidYwh9w%3D%3D>

* 1. **Gate Driver**

<https://www.mouser.com.tr/ProductDetail/Infineon-Technologies/2ED2182S06FXUMA1/?qs=BJlw7L4Cy78qqtP0UBib%2FQ%3D%3D>

<https://www.mouser.com.tr/ProductDetail/ROHM-Semiconductor/BS2103F-E2/?qs=iaprbs8w3G9rav1d9DTYOA%3D%3D>

first one dead time adjustable, second one cheap

* 1. **12V/3V3 (50mA) Regulator**

<https://www.mouser.com.tr/ProductDetail/Analog-Devices/ADP3300ARTZ-33RL7/?qs=WIvQP4zGanjig3ATp9pozQ%3D%3D>

* 1. **3V3/3V3 Isolated (300mA) Converter**

<https://www.mouser.com.tr/ProductDetail/RECOM-Power/R1SX-3333-R/?qs=AQlKX63v8Rsf1yduGKaK6w%3D%3D>

* 1. **Isolation Logic**

<https://www.mouser.com.tr/ProductDetail/Silicon-Labs/SI8620AB-B-ISR/?qs=j6MGy4L9yX20sFXZc1kgqQ%3D%3D>