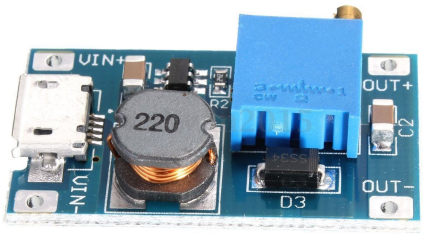
2V to 28V Adjustable Output 2A DC-DC MT3608 Step Up Boost Power Supply Voltage Regulator With Micro USB Input Connector

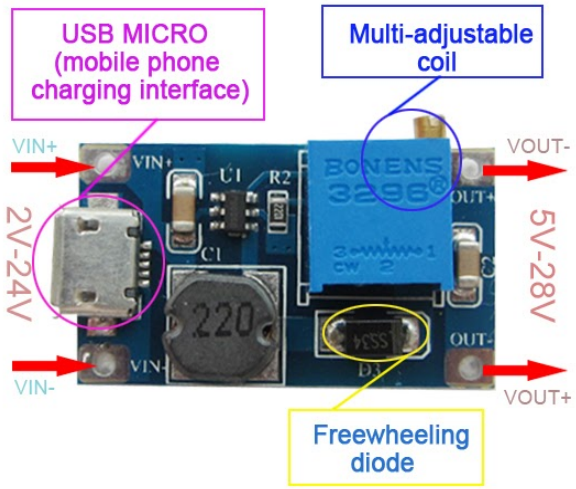


The MT3608 Boost DC-DC voltage regulator is a constant frequency, current mode step-up converter intended for small, low power applications. It features a Micro USB input connector to easily power the module by simply plugging it into a standard 5V USB power supply or power bank. It also includes input solder pads so it can also be powered by any 2V to 24V DC power supply.

The MT3608 device switches at 1.2MHz and allows the use of tiny, low cost capacitors and inductors to minimize the overall module size. Internal soft-start circuitry results in small inrush current and extends battery life. It features automatic shifting to pulse frequency modulation (PFM) mode at light loads, and includes under-voltage lockout, current limiting, and thermal overload protection to prevent damage in the event of an output overload.

Specifications:

- Maximum output current: 2A
- Input voltage: 2V ~ 24V
- Maximum output voltage: > 28V (Output voltage cannot be less than input voltage)
- Maxiumum efficiency: Up to 97%, typically 93% at Vout=12V, Vin=5V, Iout=200mA
- Dimensions: 30 mm * 11 mm * 6 mm



Operating Instructions:

- Connect the module to a +5V USB power supply or USB power bank through the micro USB connector, or attach Vin+ and Vin- to a +2V to +24V DC power supply.
- Connect the Vout+ and Vout- to an appropriate load.
- Adjust the potentiometer to vary the output voltage. Turn counter-clockwise to increase voltage. **Upon initial operation, you may need to turn the pot counter-clockwise many turns to get it into its operating range in order to increase the output voltage.**
- Input voltage should not exceed the 24V maximum input voltage.
- Output voltage should not exceed the 28V maximum output voltage.
- Peak output current should be limited to 2A maximum.