

# Usb Electronic Kits



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## Dc to DC converter

**DC TO DC Converter**

**40 V MAX**

**1,5-35V**  
**3A Max**

*Usb Electronic Kits*

The image shows a green PCB with various electronic components. A large electrolytic capacitor is the central feature. Other components include a diode, several resistors, and a small integrated circuit. Blue terminal blocks are used for input and output connections. The PCB is labeled with 'PR006' and 'Electronic Kits'. A small inset image in the top left corner shows three glowing LEDs (red, green, and blue) similar to the ones in the first image.

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## DC to DC converter

### Description

This is high performance DC-DC Step Down Adjustable Power Supply Module. Based on well know LM2756 Switching Regulator.

Specifications:

- Input voltage range: 4 V-40 V
- Output voltage range: 1.25 V-35 V
- Output current: 3 A(MAX)-need to add heat sink
- Conversion efficiency: Up to 92% (output voltage higher, the higher the efficiency)
- Switching Frequency: 150KHz
- Rectifier: Non-Synchronous Rectification
- Module Properties: Non-isolated step-down module (buck)
- Short circuit protection: current limiting, since the recovery
  
- Load regulation:  $\pm 0.5\%$
- Voltage regulation:  $\pm 0.5\%$
- Dynamic response speed: 5% 200uS
- Mode of connection:welding
- Size:25mm\*50mm (2 inch \* 1 inch)

The LM2576 series of regulators are monolithic integrated circuits ideally suited for easy and convenient design of a step-down switching regulator (buck converter). All circuits of this series are capable of driving a 3.0 A load

**with excellent line and load regulation. These devices are available in fixed output voltages of 3.3 V, 5.0 V, 12 V, 15 V, and an adjustable output version.**

**These regulators were designed to minimize the number of external components to simplify the power supply design. Standard series of inductors optimized for use with the LM2576 are offered by several different inductor manufacturers.**

## **Applications**

- DIY mobile power supply**
- Step-down charger**
- Electronic equipment charger**
- System preceding stage charger**

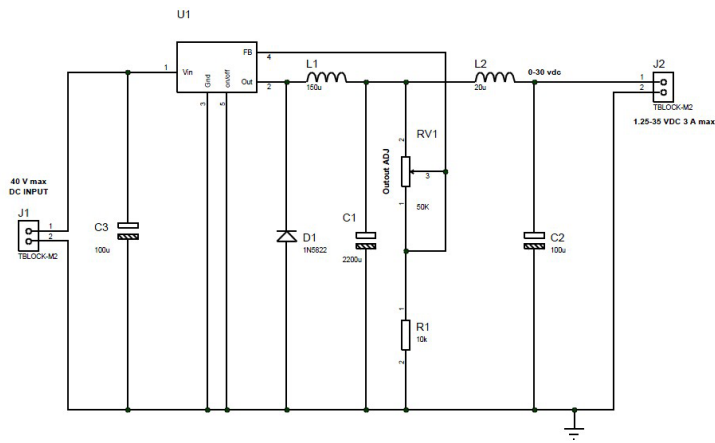
## **Common parts Datasheets and schematics**

The kits use only familiar electronic components! General purpose transistors and op-amps and generally "found everywhere" electronic parts!

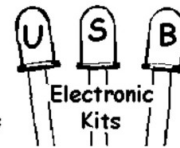
# DC TO DC CONVERTER

4-40 VDC INPUT/1.2-35 VDC OUTPUT

P/N:PR006  
REL.:03/12



travel into the  
world of electronics



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