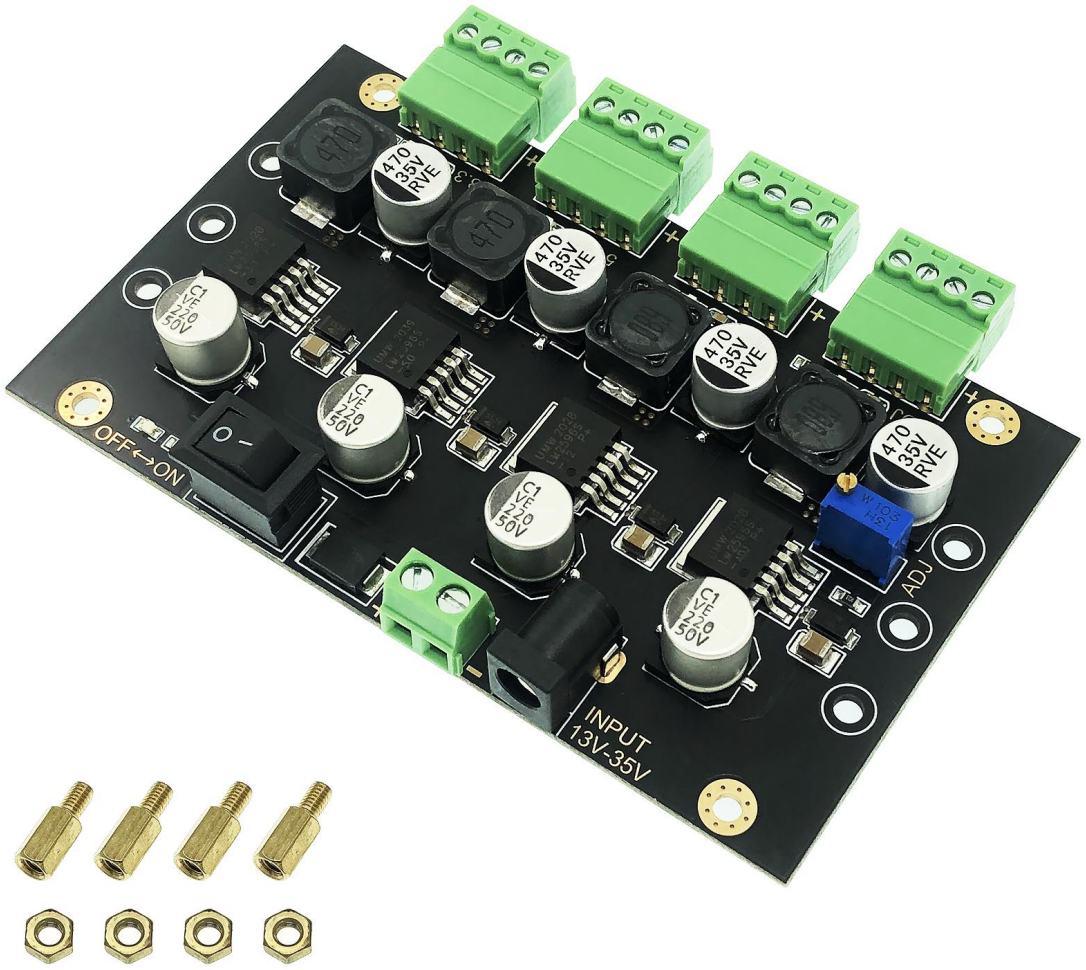
LM2596x4CH UserManual



1. General Description:

The LM2596x4CH power supply board is a multi-output high-efficiency DC to DC step down (buck) switching power supply solution. It supports 3.3V, 5V, 12V and adjustable 4 channel simultaneous voltage output. Each power supply channel support 3A maximum output load current and total 8A maximum output load current.

LM2596x4CH is applicable for the applications which need simultaneous multichannel power supply. It's very easy for setup and high conversion efficiency.

May I draw your attention to below items:

(1) For the adjustable channel, it's continuously adjustable.please adjust the blue potentiometer knob (clockwise rotation generally boost, buck counterclockwise rotation) and with a multimeter to monitor the output voltage reaches the required voltage.

(2) When the output current is greater than 2.5A , output power greater than 10W or work for a long hours you'd better add a heat sink on this LM2596.

(3) We provide alternative power input channel. Don't power them simultaneously.

(4) Double check your connection and the silk-screen on board. Make sure that the positive and negative poles are not connected reversely, and Do not reverse the input and output interface.

2. Features

1. [4 ch voltage simultaneous output] On-board 4 PCS LM2596 chips. Support 3.3V, 5V, 12V and adjustable simultaneous voltage output.

2. [High Current Output] Whole board support total 8A maximum output load current and each power supply channel support 3A maximum output load current.

3. [Wide Input Range] Support 13V~35V input. It's a step-down type module ,so input voltage must be 1 V higher than the output voltage, no boost

4. [Flexible And Reliable Design] Thermal design with PCB. On-board 4 x screw holes and 2 x DIN Rail holes, fit for 35mm DIN rail.

5. [High Quality Component] High-Q inductors , Al capacitors and output LED indicator to make sure stable output voltage.

3. Technical Specification

Module type	switching power supply	
Input voltage	13V~35V	
Output Voltage	3.3 V	Maximum 3A/9.9W
	5 V	Maximum 3A/15W
	12 V	Maximum 3A/36W
	ADJ Voltage	Maximum 3A/36W
Maximum Out Current	8A	
Transfer Efficiency	>85%	
Switching Frequency	150Khz	
Output Noise	No load	15Mv
	12V/2A	< 50Mv
Working Temperature	-20° ~ 70°	
Relative humidity	15-90%, not condensing	
Storage Temperature	-40° ~ 85°	
PCBA Size (L * W * H)	113.00mm * 67.90mm*15mm	
Weight		

4. Hardware Description