

Applications:

Low Power Wifi Module:ESP8266
Low-power Bluetooth module : HC-05 HC-06
Low-power Wireless UART module : HC-11 HC-12
Low-power wireless module : CC1101 CC2500 Nrf24I01+
Low-power LED Driver

Wiring Diagram:
CE021_5

Product Name: 2 in 1 DC DC Step-Down & Step-Up Converter 1.8V-5V 3V 3.7V to 3.3V Power Module

Module No.: CE021

Packing list:

1 PCS 100MA 2 in 1 DC-DC Step-Down & Step-Up Converter 1.8V-5V to 3.3V module

Description:

Low Noise, Regulated Charge Pump DC/DC Converter
2 in 1 DC-DC Step-Down & Step-Up Converter module
Fixed 3.3V+-4% Output
Voltage Input Range: 1.8~5V
Long time maximum output current 100mA
Short time maximum output current 150mA
working frequency 1.2MHz.
Short-Circuit Protection
No load input current : 0.65mA
2.54mm pin pitch, Arduino Breadboard MCU Development Board friendly
Excluding Pin Size 11mm x 7.62mm x 4.5mm(small)
Weight : about 0.5g(Very very light)

Attention :

This is a DC-DC voltage converter module, Must be noted when using:
1 Input voltage can not be greater than the maximum input range
2 Output power can not be greater than the maximum load for a long time
3 Input power must be greater than the output power, because the power consumption of the module itself

Absolute Maximum Ratings (Note 1)

- V_{IN} - 0.3V to 6V
- V_{OUT}- 0.3V to 3.5V
- V_{OUT} Short-circuit Duration.....indefinite
- V_{EN}- 0.3V to 6V
- I_{OUT} (Note 2) 150mA
- Operating Temperature Range (Note 3).....- 30°C to 85°C
- Lead Temperature (Soldering 10 sec.)300°C
- Storage Temperature Range- 65°C to 125°C

Note 1: Absolute Maximum Ratings are those values beyond which the life of a device may be impaired.

Note 2: Based on long term current density limitations.

Note 3: The CE021 are guaranteed to meet performance specifications from 0°C to 70°C. Specifications over the -40°C to 85°C operating temperature range are assured by design, characterization and correlation with statistical process controls.

Electrical Characteristics

The specifications are at $T_A = 25\text{ }^\circ\text{C}$. $V_{IN} = 3.6\text{V}$, $EN = V_{IN}$, $C_{IN} = C_{OUT} = 2.2\mu\text{F}$ unless otherwise noted.

| PARAMETER | CONDITIONS | MIN | TYP | MAX | UNITS |
|------------------------------------|---|-----|------|-----|-------|
| Input Voltage Range (V_{IN}) | | 1.8 | | 5 | V |
| Output Voltage Range (V_{OUT}) | | | 3.3 | | V |
| No load input current | $I_{OUT} = 0\text{mA}$, $V_{IN} = 2.7\text{V}$ | | 0.65 | | mA |
| Switching Frequency (f_{osc}) | $I_{OUT} = 100\text{mA}$, $V_{IN} = 2.7\text{V}$ | | 1.2 | | MHz |

Typical Performance Characteristics

