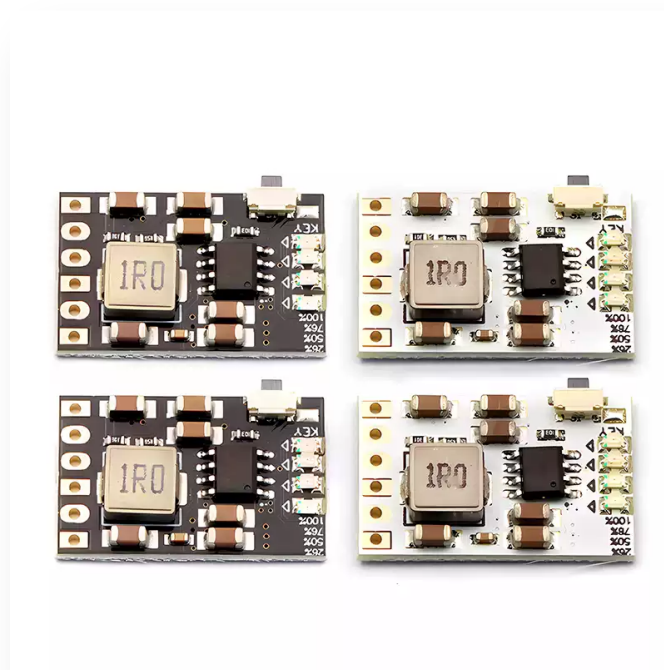


2 A 5 V Li-ion Charge / Boost Power Module

Integrated single-cell charging, 5 V boost output and protection



Product Overview

A compact power-electronics module documented from the supplied archived product page. The specifications below separate confirmed ratings from operating guidance and identify the exact module variant where the source page contains multiple options.

Electrical and Mechanical Specifications

Parameter	Value
Battery	Single-cell 3.7 V nominal / 4.2 V full-charge lithium battery
Charging input	4.5-5.5 VDC; 5 V recommended
Charge current	0-2.1 A
Charge termination voltage	4.2 V +/-1%
Charge quiescent current	100 μ A
Discharge current	0-3.5 A
Boost-output voltage	5 VDC
Output current	0-2.1 A
Peak discharge efficiency	Up to 96%
No-load discharge current	50 μ A
Protection	Over-current, over-voltage, short-circuit and over-temperature
Board dimensions	Approximately 25 x 16 mm

Key Features

- Charge and 5 V boost on one board
- Up to 2.1 A charge/output class
- Integrated lithium-battery protection
- Four-level charge/discharge indication

Operating Notes

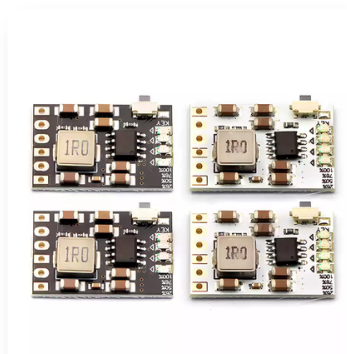
- Use a suitable protected or unprotected single-cell lithium battery as permitted by the final system design.
- The load can be powered while charging when the operating conditions are satisfied.
- Observe VIN, GND, BAT, VOUT and KEY pad functions exactly as marked on the board.

Application and Connection Guide

APPLICATION & CONNECTION

5 V CHARGER INPUT

4.5-5.5 VDC



PORTABLE 5 V LOAD

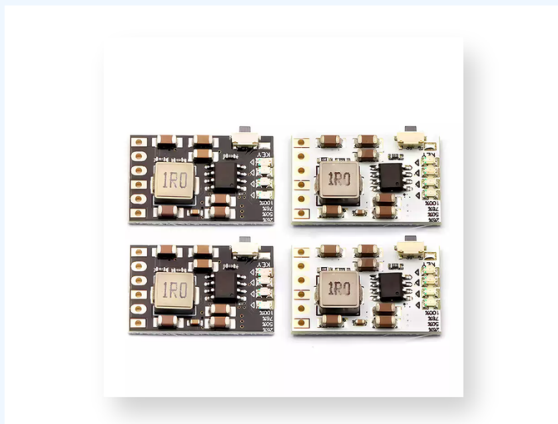
Up to 2.1 A

Verify polarity and configure voltage/current before connecting the load.

Connection Sequence

1. Confirm the input source is within the stated range. 2. Verify input and output polarity. 3. Configure voltage and current limits with the load disconnected. 4. Connect the load or battery. 5. Monitor temperature during initial operation.

KEY PRODUCT ADVANTAGES



1 Charge and 5 V boost on one board

2 Up to 2.1 A charge/output class

3 Integrated lithium-battery protection

4 Four-level charge/discharge indication