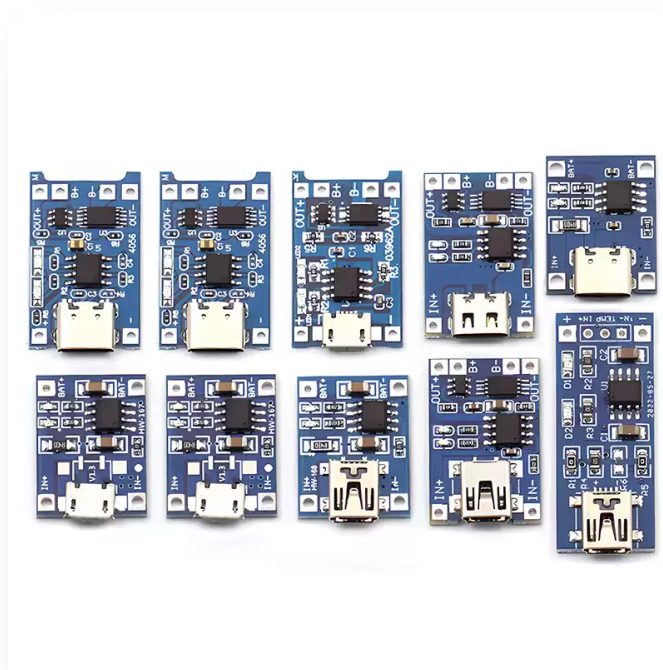


TP4056 Type-C 1 A Li-ion Charger with Protection

Single-cell charging board with integrated battery 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
Charge controller	TP4056
Input voltage	5 VDC
Input connector	USB Type-C
Charge termination voltage	4.2 V +/-1%
Maximum charge current	1 A
Battery over-discharge threshold	2.5 V
Operating temperature	-10 to +85 C
Indicators	Charge and full-charge LEDs
Protection	Integrated over-current, over-discharge and battery protection
Board dimensions	Approximately 28 x 17 mm

Key Features

- USB Type-C charging input
- 1 A single-cell charging
- Integrated protection circuit
- Charge-status indication

Operating Notes

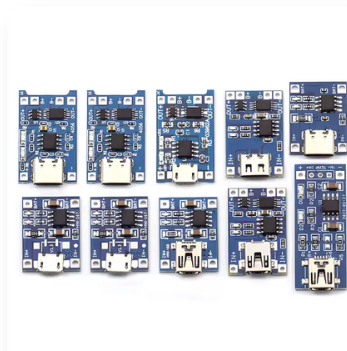
- Use only one 3.7 V nominal lithium-ion or lithium-polymer cell.
- The first battery connection may require a brief 5 V input to activate protection.
- The 5 V source should support at least 1 A.

Application and Connection Guide

APPLICATION & CONNECTION

5 V USB-C INPUT

1 A capable source



1S LI-ION CELL

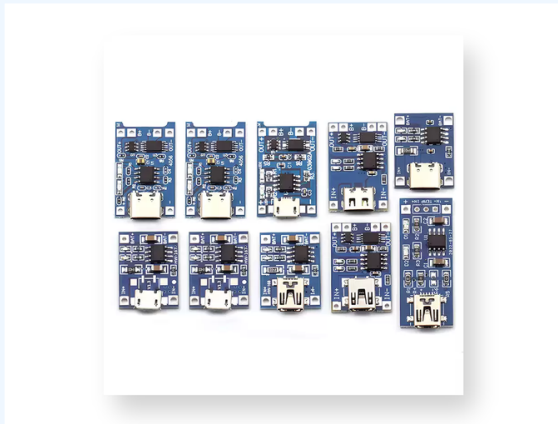
4.2 V full charge

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 USB Type-C charging input

2 1 A single-cell charging

3 Integrated protection circuit

4 Charge-status indication