

PRODUCT DATASHEET



Li-Ion Charger

333013

This professional Li-ion charger offers 1A fast charging with USB-C, ideal for Arduino and IoT projects, ensuring safe, efficient battery charging.

Full product documentation, files and tutorials: solde.red/333013

CORE ATTRIBUTES

SKU **333013**WEIGHT **7 g**BARCODE **732388675104**

DESCRIPTION

Professional Li-ion battery charging requires CC/CV (Constant Current/Constant Voltage) technology to ensure safe, efficient charging while maximising battery lifespan. This Li-ion charger delivers professional-grade charging performance with 1A fast-charging capability, modern USB-C connectivity, and safety monitoring. Designed for Arduino projects, IoT devices, and portable electronics, this charger provides the reliable, high-current charging that demanding applications require. The integrated dual-LED status system and protection circuitry ensure safe operation, while the compact design enables easy project integration. ****IMPORTANT SAFETY AND USAGE REQUIREMENTS:**** This charger provides CC/CV charging for single-cell 3.7V Li-ion/LiPo batteries only. Maximum recommended battery capacity is 4000mAh for optimal charging performance. Input voltage must be 4.5-5.5V via USB-C (standard USB power sources compatible). This board does not include reverse polarity protection, overvoltage protection, or short-circuit protection. Ensure correct battery polarity and inspect connections before use. For applications requiring protection features, consider our protected charger variant. Never leave charging unattended, monitor battery temperature during charging, and ensure adequate ventilation. Compatible with standard JST-PH-2mm battery connectors. Comprehensive technical documentation, charging guidelines, and safety protocols are available in our documentation resources below. Product usage tips: The red LED glowing means the battery is charging. The green LED glowing means the battery is charged. Easy embedding into a project with the four mounting holes on the board. Comes with 5 pins that need to be soldered. Note: This charger has no protection against reverse polarity, short-circuit, too high or too low voltage. If you're looking for a charger with a protector, click [here](#).

TECHNICAL DETAILS

- **Max output current:** 500 mA
- **Standby current consumption:** 100 μ A
- **Logic voltage level:** 5V

- **Operating voltage:** 4.5V - 5.5V
- **Connectors:** USB Type-C (female), JST battery
- **Mounting holes:** 4
- **Dimensions:** 38 × 22 mm / 1.5 × 0.9 inch

SPECIFICATIONS

QWIIC COMPATIBLE	No
BREADBOARD COMPATIBLE	No
IC PART NUMBER	TP4056M
SUPPLY VOLTAGE MIN V	5
SUPPLY VOLTAGE MAX V	5
MAX OUTPUT CURRENT A	0.5

LINKS

Open Source Hardware Files	https://github.com/SolderedElectronics/Li-ion-charger-hardware-design
Full Documentation	https://docs.soldered.com/li-ion-chargers/overview/
Hardware Details	https://docs.soldered.com/li-ion-chargers/hardware-details/
Pinout	https://cms.soldered.com/products/333013/media/333013_pinout-png_c01579.svg

GALLERY

