

高效同步升压型2A双节/3节锂电池充电器

High Efficiency, 2-A, 2-Cell/3-Cell Synchronous Boost Battery Charger

■ FEATURES

- High-efficiency 2-A, 500kHz sync-boost Charger
- Efficiency, 94% at 5V input, 8V battery, 1A charge
- VIN supports 4V~9.5V, tolerance: 28V
- 2-cell (HTC6632) or 3-cell (HTC6631) Li-Ion battery charger, Charge voltage is selectable: 8.1V/8.2V/8.3V/8.4V (HTC6632), 12.3V/12.4V/12.5V/12.6V (HTC6631); other charge voltage can be pre-booked

- Charge current

HTC6632H: 2.0A;

HTC6632L: 1.2A;

HTC6631: 1.2A;

Other charge current can be pre-booked

- Adaptively input current limit to track the input power ability
- NTC available
- Charge Status indicator pin: LED. Different indicator styles can be pre-booked
- Robustness Features
 - Input Over voltage protection, Input Undervoltage protection, Output overcurrent protection, output overvoltage protection, output shortage protection, charge overtime protection, and Overtemperature Protection
- Packages: Pb-free Packages, ESOP8

- 内置500kHz同步升压的高效2A充电
 - 效率94% ($V_{IN} = 5V$, $V_{BAT} = 8V$, $I_{CHG} = 1A$)
 - 输入电压支持4V~9.5V, 容忍最高28V输入
 - 支持双节 (HTC6632) 或三节 (HTC6631) 串联充电, 满电电压可设置: 8.1V/8.2V/8.3V/8.4V (HTC6632), 12.3V/12.4V/12.5V/12.6V (HTC6631)
- 其他满电电压可定制

- 充电电流

HTC6632H: 2.0A;

HTC6632L: 1.2A;

HTC6631: 1.2A;

其他充电电流可定制

- 支持自动调节充电电流以自适应适配器负载能力
- 支持NTC保护
- LED脚支持充电状态指示, LED指示可定制
- 保护: 输入过压、输入欠压、输出过流、输出过压、输出短路、充电超时、过温保护等
- ESOP8封装

■ APPLICATIONS

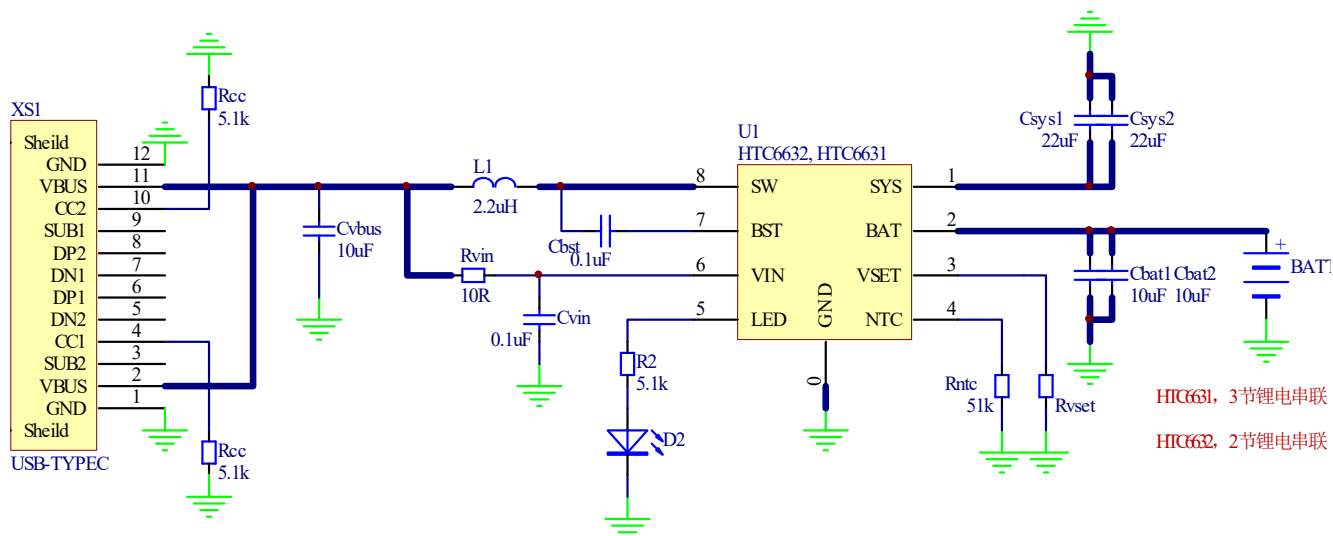
- Bluetooth/Wi-Fi Speakers
- Portable Speakers
- 蓝牙/ Wi-Fi音箱
- 便携式音箱
- POS Printers
- Security Cameras
- POS打印机
- 安全摄像机
- 2-cell / 3-cell Battery Charging
- 2节或三节串联锂电池充电场合

■ DESCRIPTION

The HTC6632, 6631 is highly-integrated 2A sync-boost switch-mode battery charger for 2-cell (HTC6632) or 3-cell (HTC6631) Li-Ion and Li-polymer battery.

HTC6632, 6631是一款内置同步升压的高集成2A电池充电芯片, 支持2节 (HTC6632) 或3节 (HTC6631) 串联锂电池充电。

TYPICAL APPLICATION



1. VSET, 充电满电电压微调。如下表

R _{VSET}	Charge Voltage	
	HTC6632	HTC6631
1K	8.1V	12.3V
68K	8.2V	12.4V
120k	8.3V	12.5V
NC	8.4V	12.6V

2. NTC, 设置 NTC 保护, 不使用时, 接 51k 电阻到地; 其对外放出 20uA 电流, 检测 NTC 端电压进行 NTC 保护, 如下表:

V _{NTC}	Status
V _{NTC} > 1.32V	Low Temperature Protection, Stop Charting
0.56V < V _{NTC} ≤ 1.32V	Normal
0.43V < V _{NTC} ≤ 0.56V	High Temperature Warning, I _{CHG_NTC} = I _{CHG} /2
V _{NTC} ≤ 0.43V	High Temperature Protection, Stop Charging

3. LED, 为充电模式指示, 充电状态指示:

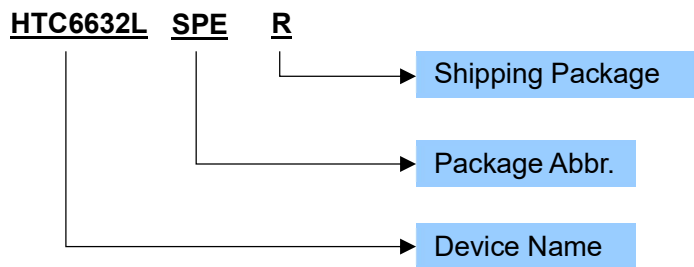
State	LED充电状态指示
亮 (output high)	充电
闪烁	异常状态
灭 (output low)	满电

4. VIN 端极限电压为 28V
5. 电感可使用典型 2.2uH，饱和电流 I_{SAT} 建议大于 $1.4 \times \frac{8.4 \times I_{CHG}}{4.5 \times 0.9}$ (2cell) or $1.4 \times \frac{12.6 \times I_{CHG}}{4.5 \times 0.9}$ (3cell)
6. SYS 端，靠近引脚建议放置至少两个 22uF 电容；BAT 端，靠近引脚建议放置至少 2 个 10uF 电容，并关注电容额定电压（建议 $\geq 20V$ ）

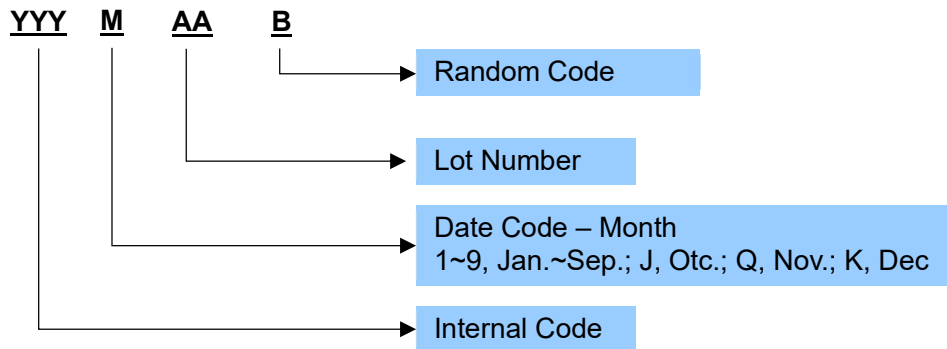
ORDERING INFORMATION

Part Number	Description	Package Type	Package Abbr.	MSL Level	Eco Plan	Marking	Shipping Package / MOQ
HTC6632LSPER	Charge Current = 1.2A	ESOP8	SPE	MSL3	RoHS	HTC6632 YYYMAAB ¹	Tape and Reel (R) / 2500pcs
HTC6632HSPER	Charge Current = 2A	ESOP8	SPE	MSL3	RoHS	HTC6632 YYYMAAB	Tape and Reel (R) / 2500pcs
HTC6631SPER	Charge Current = 1.2A	ESOP8	SPE	MSL3	RoHS	HTC6631 YYYMAAB	Tape and Reel (R) / 2500pcs

Part Number



Production Tracking Code



¹ YYYMAAB is production tracking code
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