



MP2664 Evaluation Kit



500mA, I²C Controlled Battery Charger with Power-Path Management for Single-Cell Li-Ion Battery in QFN package

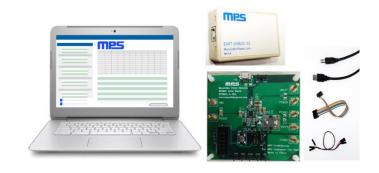
The MP2664 is a highly integrated, single-cell, Li-lon/Li-Polymer battery charger with system power-path management for space-limited, portable applications. The MP2664 uses input power from either an AC adapter or a USB port to supply the system load and charge the battery independently. The charger features pre-charge, fast charge current (CC), constant voltage (CV) regulation, charge termination, and charge status.

The power stage features a low dropout regulator from the input to the system and a $100m\Omega$ switch from the battery to the system. Power-path management separates the charging current from the system load, which allows for proper charge termination and keeps the battery in full-charge mode.

The MP2664 provides svstem short-circuit protection (SCP) by limiting the current from the input to the system and the battery to the system. This feature is especially critical to prevent the Li-Ion battery from being damaged by excessively high currents. An on-chip battery under-voltage lockout (UVLO) cuts off the path between the battery and the system if the battery voltage drops below the programmable battery UVLO threshold, which prevents the Li-lon battery from being overdischarged. An integrated I2C control interface allows the MP2664 to program the charging parameters.

Kit Contents

- EV2664 evaluation board (EV2664-G-00A)
- EVKT-USBI2C-02
 - USB to I²C Communication Interface
 - Ribbon Cable
 - USB Flash drive for installing GUI
- Online resources that include: datasheet, user guide, product brief, and GUI



Feature	Specification
Supply for Board	4.35V - 5.5V
Operating Input Voltage	4.35V - 5.5V
Battery Regulation Voltage	3.6V - 4.545V
Fast Charge Current	8mA - 535mA
Input Voltage Regulation	V _{BATT} + 400mV
Input Current Limit	85mA - 455mA
Discharge Current	400mA - 3200mA
Operating Systems Supported	Windows XP, 7, and later
System Requirements	Minimum 22.2 MB free
GUI Software	MP2664 V1.1
EVB Size (L x W)	6.35 cm x 6.35 cm





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Quick Start (Refer to user guide for more details.)

- 1. Install the GUI software.
- 2. Use the provided ribbon cable to connect the EVB and the USB to I²C communication interface.
- 3. Preset the power supply output between 4.35V and 5.5V and connect the EVB.
- 4. Connect the communication interface to the PC and turn the power supply on.
- 5. Open the GUI software and program as needed.

^{*}Kit offers rapid application assessment and requires minimal external components

