

OZ8682

SMBus Level 2 Battery Charger with Hybrid Power Boost

FEATURES

- Hybrid Power Boost feature allows battery to provide power in parallel with the AC adapter
- NMOS synchronous topology with fixed frequency and >95% efficiency
- $\pm 0.5\%$ battery voltage, $\pm 3\%$ charging current, and $\pm 3\%$ adapter current accuracies
- Simplified SMBus control of battery voltage, charge current and adapter input current
- 11-bit DAC battery voltage setting (1.024V – 19.200V)
- 6-bit DAC charge current setting (128mA – 8.064A)
- 6-bit DAC adapter current setting (256mA – 11.008A)
- Space-saving 16-pin QFN
- Automatic AC Adapter voltage detection
- Outputs valid adapter presence
- Outputs adapter current/battery discharge current
- Protection includes: built-in battery over-voltage, over-current, reverse connection, and embedded thermal shutdown
- Charges batteries of various chemistries, including Li-Ion with 1 to 4 cells

GENERAL DESCRIPTION

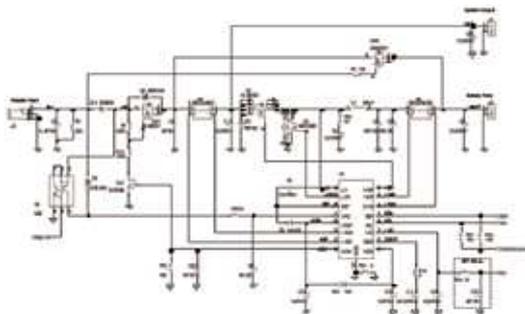
OZ8682 is a highly integrated, SMBus-programmable, multi-chemistry battery charge controller with a hybrid power boost feature. It is intended to be used as a smart battery charger (SBC) within a smart battery system (SBS), providing complete battery charging control for single battery portable computer systems.

OZ8682 uses two high-side current sensors. When charging with the system ON, OZ8682 dynamically allocates all remaining AC adapter current not used by the system to the charger, achieving the shortest possible charging time.

APPLICATIONS

- Notebook/Netbook Computer
- Ultra Mobile Computers

APPLICATION DIAGRAM



U.S. Patent #'s 6,498,461; 6,611,129; 6,861,823; 7,202,634; 7,719,236; and more patents pending.