

Mobile Communications Product Guide

Part Number	Description	Package(s) Available (Lead-free)	Page No.
Power Management ICs			
OZ522	Charger + DC/DC PMU	20 SSOP	23
OZ8071	USB Protection IC and Battery Charger	20 QFN	24
OZ8555	Battery Charger/Boost Controller	28 QFN	25
OZ8556	Battery Charger/Boost Controller	28 QFN	26
OZ8618	Battery Charge Controller with Power Selector	24 QFN	27
OZ8660	Single Battery Charger Controller	40 VQFN	28
OZ8681	SMBus Level 2 Battery Charger	16 QFN	29
OZ8682	SMBus Level 2 Battery Charger with Hybrid Power Boost	16 QFN	30
OZ8690	SMBus Level 2 Battery Charger with Hybrid Power Boost	40 VQFN	31
OZ8806	Battery Monitor + High Accuracy Coulomb Counter	10 DFN	32
DC/DC Converter Controllers			
OZ8002	Dual Channel MOSFET Driver	16 QFN	33
OZ8013	3A Synchronous DC/DC Regulator	16 QFN	34
OZ8033	3A Low Dropout Linear Regulator	8 E-SOP	35
OZ8111	Ultra High Efficiency DC/DC	16 QFN	36
OZ8116/ OZ8138	Single Ultra High Efficiency DC/DC / Dual Ultra High Efficiency DC/DC	16 QFN/ 24 QFN	37
OZ812	DDR/DDR2/DDR3 Integrated Power Supply	24 QFN	38
OZ8125	2 Phase CPU DC/DC Compliant with Intel VR12.5	28 QFN	39
OZ8127	2 Phase CPU DC/DC Compliant with Intel VR12.6+	28 QFN	40

OZ8660

Single Battery Charger Controller

FEATURES

- Highly integrated, high accuracy, single battery charge controller
- Synchronous buck converter topology with integrated power MOSFET
- System power selector with integrated power MOSFET
- Charging current up to 4A; high efficiency of >94%
- 0.5% constant voltage, $\pm 2\%$ charging current, and $\pm 2\%$ input current limiting accuracies
- Outputs adapter and battery charge/discharge current information for monitoring
- Analog inputs to program charging current, charging voltage and input current limit
- Programmable wake-up voltage threshold
- Protection includes: battery reverse connection, built-in adapter under-voltage ($8.75V \leq V_{VAD}$), built-in battery under-voltage/short circuit, over-voltage and over-current, built-in protection for operation at low charging current and over-temperature shutdown
- Dynamic AC adapter current allocation for maximum charging rate
- Automatic AC Adapter voltage detection
- Charges batteries of various chemistries, including Li-Ion with 2, 3, and 4 cells

GENERAL DESCRIPTION

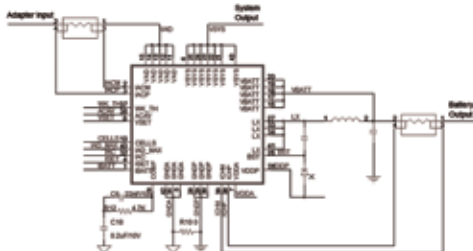
OZ8660 is a high performance battery charge controller with four power MOSFETs, from power switching and selector, integrated into one package. It has input and charging current sensing, and programmable wake-up threshold with associated logic and drivers to manage the integrated system's power path. It can operate under the supervision of a host microcontroller, and provides complete battery charging control for single battery portable systems.

OZ8660 uses two high-side current sensors. When charging with the system ON, it dynamically allocates all remaining AC adapter current not used by the system to the charger, achieving the shortest possible charging time.

APPLICATIONS

- Notebook Computer
- Portable Electronics

APPLICATION DIAGRAM



U.S. Patent #'s 6,498,461; 6,611,129; 6,861,823; 7,202,634; 8,350,532; 8,450,977; and more patents pending.