Mobile Communications Product Guide

Part Number	Description	Package(s) Available (Lead-free)	Page No.
Power Management ICs			
OZ8070A	USB Protection IC and Battery Charger	20 QFN	7
OZ8618	Battery Charge Controller with Power Selector	24 QFN	8
OZ8681	SMBus Level 2 Battery Charger	16 QFN	9
OZ8682	SMBus Level 2 Battery Charger with Hybrid Power Boost	16 QFN	10
OZ8770/1	Cool Charge® with Adapter Power Recognition Function	24 QFN	11
OZ8778	Cool Charge® Controller with Controlled Adapter Power	24 QFN	12
OZ8806	Monitor + High Accuracy Coulomb Counter	10 DFN	13
OZ522	Charger + DC/DC PMU	20 SSOP	14
DC/DC Converter Controllers			
OZ8033	3A Low Dropout Linear Regulator	8 E-SOP	15
OZ8013	3A Synchronous DC/DC Regulator	16 QFN	16
OZ8111	Ultra High Efficiency DC/DC	16 QFN	17
OZ8116/ OZ8138	Single Ultra High Efficiency DC/DC / Dual Ultra High Efficiency DC/DC	16 QFN/ 24 QFN	18
OZ8150	Single Ultra High Efficiency DC/DC with 5V Regulator and Switch-Over	16 QFN	19
OZ8153	Dual Ultra High Efficiency DC/DC with 5V Regulator and Switch-Over	24 QFN	20
OZ8155	Dual Ultra High Efficiency DC/DC with 5V Regulator and Switch-Over	28 QFN	21
OZ812	DDR/DDR2/DDR3 Integrated Power Supply	24 QFN	22
OZ838	Dual Phase Ultra High Efficiency DC/DC for AMD Mobile Processors	32 QFN	23
OZ8380A	Dual Phase Ultra High Efficiency DC/DC for AMD Mobile Processors	32 QFN	24

OZ8153

Dual Ultra High Efficiency DC/DC with 5V Regulator and Switch-Over

FEATURES

- Dual DC/DC SMPS controller with integrated drivers, 5V/150mA and 3.3V/20mA LDOs
- Two CRC controllers; and Integrated boost diodes
- High full load efficiency up to 94%; High light load efficiency of >85% at 100mA
- V_{OUT} accuracy of 1% or better
- Input voltage from 5.5V to 24V
- Output voltage adjustable from 1V to 5.5V; and presets on both channels
- Output load current up to 15A
- LDO bootstrap switch-over if V5SO > 4.7V
- Independent ON/SKIP signals; and Power Good open drain output
- Soft start at start-up; Soft stop at shutdown
- Voltage feed-forward compensation; and User-adjustable operating frequency
- Dynamic voltage change support; and Non-audio skip mode
- Output Protection: latched over-voltage and under-voltage, and Valley type over-current
- Input Protection: under-voltage lockout on VDDA and VIN

GENERAL DESCRIPTION

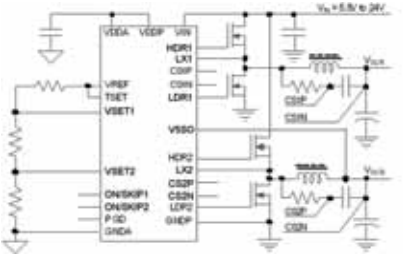
OZ8153 steps down the high battery voltage to low output voltages in the range of 1.0V to 5.5V. High efficiency, DC accuracy, and excellent transient response make OZ8153 suitable to supply the main system voltages (5V and 3.3V) to the CPU peripherals, chipset cores, and graphics processors.

OZ8153's voltage feed-forward compensation ensures high rejection of input voltage transients, typically occurring when the AC adapter is plugged in or removed.

APPLICATIONS

- Power Supplies for Notebook CPUs and Peripherals

APPLICATION DIAGRAM



U.S. Patent #'s 6,844,710; 6,965,221; 7,098,642; 7,202,650; 7,466,113; 7,598,718; 7,816,896; 8,143,872; and more patents pending.