High Voltage 1.5x Charge Pump

Features

- **Input Range: 8V to 24V**
- **Output Range: 12V to 36V**
- **56µA Quiescent Current at 8V Supply Voltage and 96µA Quiescent Current at 24V Supply Voltage**
- **±3% Regulated Output**
- **10mA Output Current with a Voltage Drop of 900mV**
- **Power Good Function**
- **Over-Temperature Protection**
- **MSOP-8 Package**

Applications

- **Notebook Computers**

General Description

The G5933 is a high-voltage switched-capacitor charge pump that provides the regulated output voltage of 1.5x input voltage. Input voltages ranging from 8V to 24V can be converted into a 12V to 36V output supply. The device is ideal for battery-powered conversion applications in notebook computers with a typical operating current of 56µA at 8V supply and 96µA at 24V supply. The G5933 can deliver 10mA output current with a voltage drop of 900mV at 24V supply.

The G5933 has a NMOS open-drain output pin for power good indication. When V_{OUT} > 1.5 *V_{IN}* 90%, the NMOS will be turned off immediately and PG pin will be pulled high by external resistor.

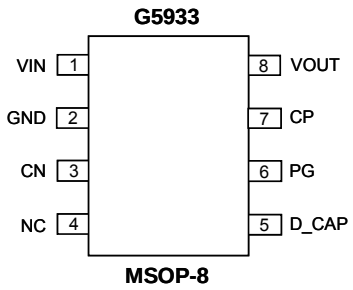
The G5933 contains an over-temperature circuit to protect the device under continuous output short circuit conditions. The device is available in a 8-pin MSOP package.

Ordering Information

ORDER NUMBER	MARKING	TEMP. RANGE	PACKAGE (Green)
G5933P81U	G5933	-40°C to +85°C	MSOP-8

Note: P8: MSOP-8
1: Bonding Code
U: Tape & Reel

Pin Configuration



Typical Application Circuit