Switched Capacitor Voltage Inverter

Features

- Inverts Input Supply Voltage
- 25mA Output Current with a Voltage Drop of 250mV
- 0.45mA Quiescent Current at 3.3V Supply Voltage
- 99% Voltage Conversion Efficiency
- 1.8V to 5V operating range
- Require Only Two Capacitors
- **■** Over-Temperature Protection
- 8-Pin SOP Package

Applications

- Cell Phone
- Small LCD Panels
- Portable Equipment
- Handy-Terminals, PDAs
- **■** Battery-Operated Equipment

General Description

The G5931 is an unregulated charge-pump voltage inverter which may be used to generate a negative supply from positive input. Input voltages ranging from +1.8V to +5V can be inverted into a -1.8V to -5V output supply. The devices is ideal for both battery- powered and board level voltage conversion applications with a typical operating current of 0.45mA at 3.3V supply.

The G5931 can deliver 25mA output current with a voltage drop of 250mV. The parts are over -temperature protected.

Applications include cell phones, PDAs, and other portable equipment. The devices is available in 8-pin SOP Package.

Ordering Information

ORDER	MARKING	TEMP.	PACKAGE
NUMBER		RANGE	(Pb free)
G5931P1U	G5931	-40°C to 85°C	SOP-8

Note: P1 : SOP-8 U: Tape & Reel

Pin Configuration

G5931 NC 1 0 8 IN CP+ 2 7 NC GND 3 6 NC CP- 4 5 OUT

Typical Application Circuit

