

AS1340

50V, Micropower, DC-DC Boost Converter

Product Brief

1 General Description

The AS1340 boost converter contains a 1.4A internal switch in a tiny TDFN-8 3x3mm package. The device operates from a 2.7 to 5.5V supply, and can boost voltages up to 50V output.

The output voltage can easily be adjusted by an external resistor divider.

The AS1340 uses a unique control scheme providing the highest efficiency over a wide range of load conditions. An internal 1.4A MOSFET reduces external component count, and a fixed high switching frequency (1MHz) allows for tiny surface-mount components.

The AS1340 also features power-OK circuitry which monitors the output voltage.

Additionally the AS1340 features a low quiescent supply current and a shutdown mode to save power. During shutdown an output disconnect switch separates the input from the output.

The AS1340 is ideal for LCD or OLED panels with low current requirements and can also be used in a wide range of other applications.

The device is available in a low-profile TDFN-8 3x3mm package.

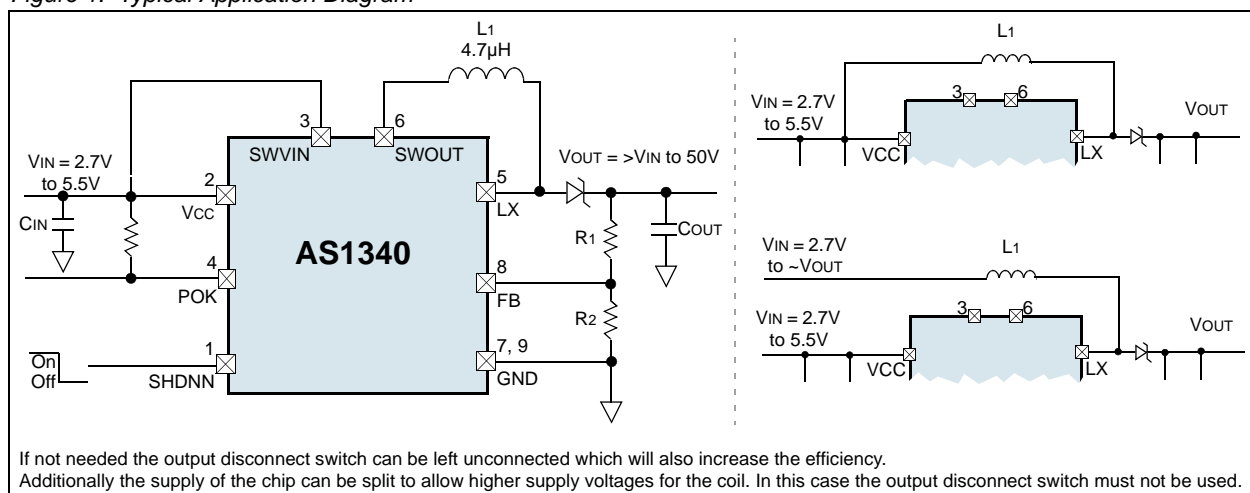
2 Key Features

- 2.7V to 50V Adjustable Output Voltage
- 2.7V to 50V Input Voltage Range
- 2.7V to 5.5V Supply Voltage Range
- High Output Currents:
 - 100mA @ 12V from 3.3V V_{IN}
 - 50mA @ 24V from 3.3V V_{IN}
 - 30mA @ 36V from 3.3V V_{IN}
- Efficiency: Up to 90%
- Switching Frequency: 1MHz
- Output Disconnect
- Power-OK Output
- Operating Supply Current: 30 μ A
- Shutdown Current: 0.1 μ A
- TDFN-8 3x3mm Package

3 Applications

The device is ideal for OLED display power supply, LCD bias generators, mobile/cordless phones, palmtop computers, PDAs and organizers, handy terminals or any other portable, battery-powered device.

Figure 1. Typical Application Diagram



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