620kHz/1.25MHz Step-up DC/DC Converter

General Description

The TP3603 is a high performance current mode, PWM step-up converter with pin selectable operating frequency. With an internal 1.6A, 200mΩ MOSFET, it can generate 12V at up to 400mA output current from a 5V supply. The selectable 620kHz and 1.25MHz allows smaller inductors and faster transient response. An external compensation pin gives the user greater flexibility in setting loop compensation allowing the use of low ESR Ceramic output capacitors. Soft-start is controlled with an external capacitor, which determines the input current ramp rate during start-up.

When shut down, it draws < 10μA of current and can operate down to 2.5V input supply. These features along with 1.25MHz switching frequency makes it an ideal device for portable equipment and TFT-LCD displays.

The TP3603 is available in an 8-pin MSOP package. The device is specified for operation over the full -40°C to +85°C temperature range.

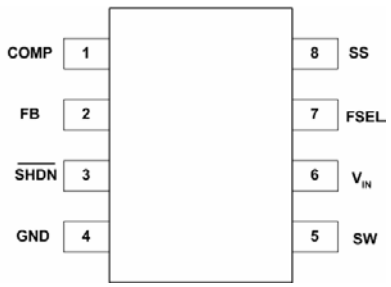
Ordering Information

TP3603-□□

F:Pb-Free

Package Type
M8:MSOP-8

Pin Configurations



Features

- 90% Efficiency
- 1.6A, 200mΩ Power MOSFET
- 2.5V to 5.5V Input Range
- Adjustable Output Voltage up to 18V
- 620kHz/1.25MHz Switching Frequency Selection
- Adjustable Soft-Start
- Internal Thermal Protection
- Small MSOP-8 package
- RoHS Compliant and 100% Lead (Pb)-Free

Applications

- TFT-LCD Displays
- DSL Modems
- Set-Top Boxes
- PCMCIA Cards
- Portable Equipment
- Handheld Devices

Marking Information

For marking information,contact our sales representative directly or through a TPmicro distributor located in your area.