

## PFM Step-Up DC-DC Converters with Internal Schottky Diode

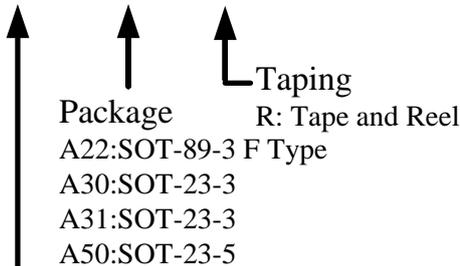
### General Description

The iD8603 compact, high-efficiency, PFM step-up DC-DC converters are available in SOT-89-3, SOT-23-3 and SOT-23-5 packages. They feature an extremely low quiescent supply current to ensure the highest possible light-load efficiency. Optimized for operation from one to two alkaline or nickel-metal-hydride (NiMH) cells, or a single Li+ cell, these devices are ideal for applications where extremely low quiescent current and ultra-small size are critical.

The iD8603 includes an internal Schottky diode that reduces PCB board area and total BOM cost. The family offers different combinations of fixed or adjustable outputs, and shutdown control.

### Ordering Information

iD8603 -



Output Voltage	Voltage Code
1.8 V	18
1.9 V	19
2.1 V	21
2.2V	22
2.5 V	25
2.7 V	27
2.8 V	28
3.0 V	30
3.3 V	33
4.0 V	40

### Applications

- Remote Wireless Transmitters
- Personal Medical Devices
- Digital Still Cameras
- Single-Cell Battery-Powered Devices
- Low-Power Hand-Held Instruments
- MP3 Players
- Personal Digital Assistants (PDA)

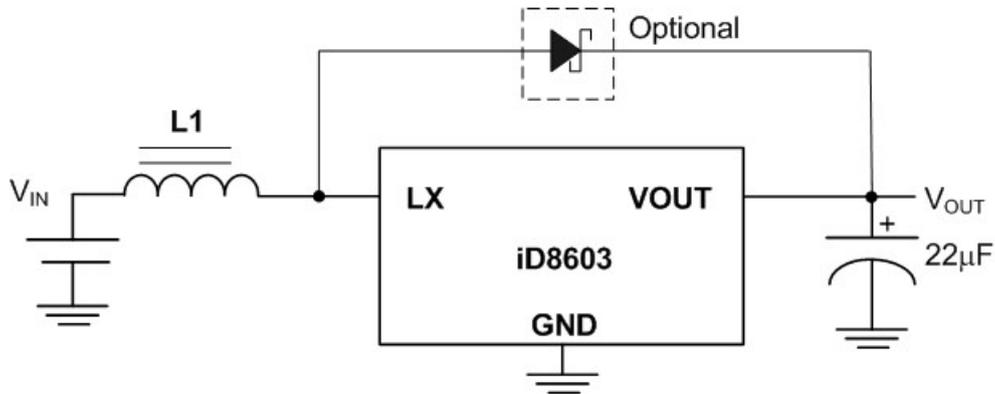
### Features

- Internal Schottky Diode
- Up to 80% Efficiency (External Schottky Diode)
- Ultra Low Input Current (9µA at Switch Off)
- ±2.0% Output Voltage Accuracy
- Fixed Output Voltage
- Up to 200mA Output Current
- 0.8V to 5.5V Input Voltage Range
- SOT-23-3, SOT-23-5 and SOT-89-3 Package

### Marking Information

For marking information, please contact our sales representative directly or through distributor around your location.

### Typical Application Circuit



#### Absolute Maximum Ratings

Supply Voltage $V_{IN}$	7V
Power Dissipation, $P_D$ @ $T_A=25^\circ\text{C}$	
SOT-89-3	571mW
SOT-23-3 / SOT-23-5	400mW
Thermal Resistance, $\theta_{ja}$	
SOT-89-3	175°C/W
SOT-23-3 / SOT-23-5	250°C/W
Lead Temperature	260 °C
Storage Temperature	-65°C to 150°C
ESD Susceptibility	
HBM (Human Body Mode)	4kV
MM (Machine Mode)	300V

#### Recommended Operating Conditions

Input Voltage $V_{IN}$	0.8V to 5.5V
Junction Temperature	-40°C to 125°C
Ambient Operating Temperature	-40°C to 85°C