

4.5V-16V, 2A, 600Khz Synchronous Step-Down Converter Applications

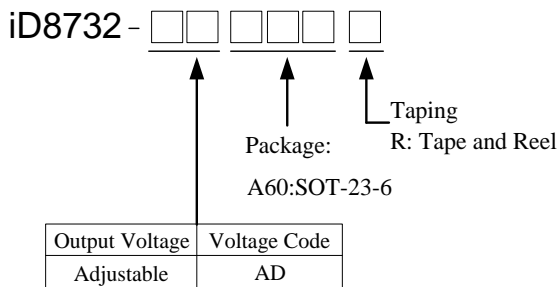
General Description

The iD8732 is a fully integrated, high– efficiency 2A synchronous rectified step-down converter. The iD8732 operates at high efficiency over a wide output current load range.

This device offers two operation modes, PWM control and PFM Mode switching control, which allows a high efficiency over the wider range of the load.

The iD8732 requires a minimum number of readily available standard external components and is available in an 6-pin SOT23 ROHS compliant package.

Ordering Information



- Flat Panel Television and Monitors
- Digital Set Top Boxes
- Distributed Power Systems
- Wireless and DSL Modems
- Notebook Computer

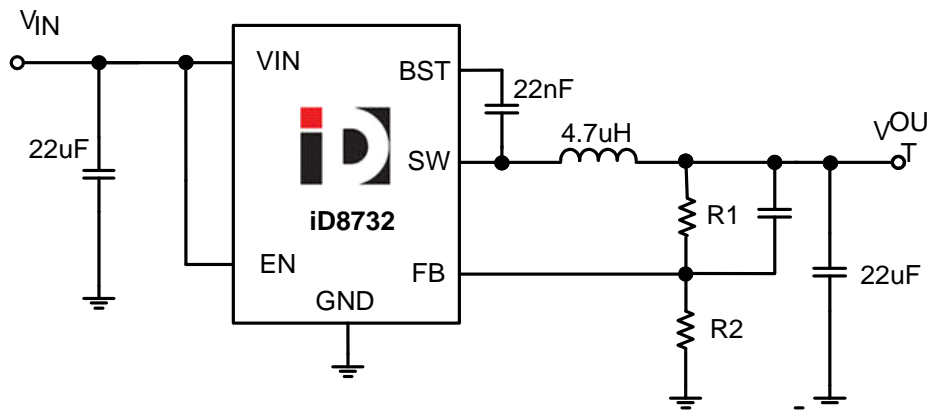
Features

- Wide Input Range: 4.5V-16V
- High Efficiency: Up to 96%
- 600KHz Frequency Operation
- 2AA Output Current
- 0.6V Reference
- Slope Compensated Current Mode Control for Excellent Line and Load Transient Response
- Inrush Current Limit and Soft Start
- Over Current Protection with Hiccup-Mode
- Thermal Shutdown
- Integrated internal compensation
- Stable with Low ESR Ceramic Output Capacitors
- Available in SOT23-6 Package

Marking Information

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

Typical Application Circuit



Absolute Maximum Ratings

V_{IN} , SW, EN	-0.3V to 17V
BST Voltage	-0.3V to SW + 5V
FB Voltage	-0.3V to +6V
Power Dissipation, P_D @ $T_A=25^\circ\text{C}$	
SOT-23-6	0.6W
Thermal Resistance, θ_{JA}	
SOT-23-6	170°C/W
Thermal Resistance, θ_{JC}	
SOT-23-6	130°C/W
Lead Temperature	260°C
Storage Temperature	-55°C to 150°C
ESD HBM (Human Body Mode)	2KV
ESD MM (Machine Mode)	200V

Recommended Operating Conditions

Supply Voltage V_{IN}	4.5V to 16V
Junction Temperature	-40°C to 125°C
Ambient Operating Temperatures	-40°C to 85°C