



IDS

IDS-PM24A Series Step-Up DC-DC Converters For Single-Cell Battery-Powered Devices

Unique boot circuit ensures start-up even with maximum load

Key Features

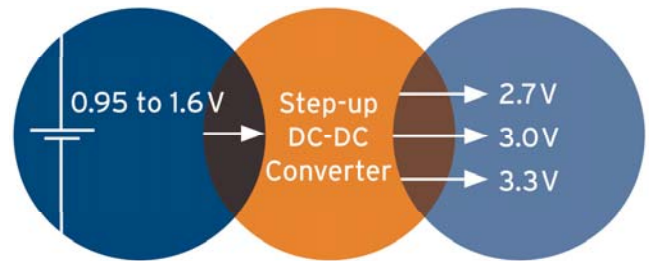
- High temperature range: -40°C to 100°C
- Guaranteed start-up at very high load currents (>100Ω)
- Input voltage range: 0.95V to 1.6V
- 0.95V guaranteed start-up with maximum load
- 1.6μA typical quiescent supply current
- True output disconnect feature
- No external diode or FET needed
- Fixed output voltage selectable: 2.7V; 3.0V or 3.3V
- Downward compatible with Maxim MAX1724EZK27/30/33

Applications

- Single-cell, battery-powered devices

Package

- Thin SOT23-5 (max. height 1.1mm)

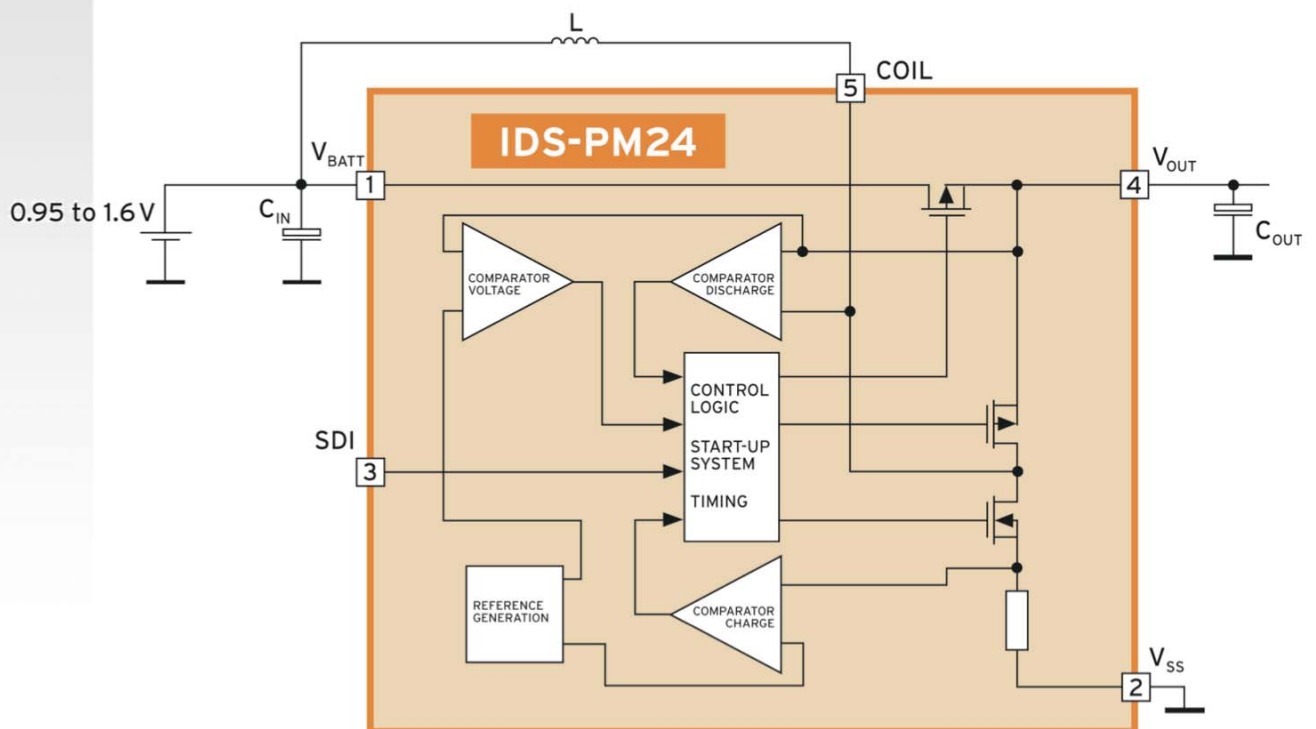


Description

The IDS-PM24 series are high-efficiency step-up dc-dc converters optimized for single-cell, battery-powered devices. These converters are ideal for applications where extremely low quiescent current and very small form factor are critical

The converters are available with three fixed output voltages, namely 2.7V, 3.0V and 3.3V. An on-chip unique boot circuitry ensures start-up even with very high load currents (>100Ω).


Block Diagram



Pin Description

PIN #	PIN NAME	DESCRIPTION
1	V_{BATT}	Battery input and coil connection
2	V_{SS}	Negative supply and ground
3	SDI	Shutdown input. High for normal operation and low for shutdown
4	V_{OUT}	Power output, also provides bootstrap power to the IC
5	COIL	Internal N-channel MOSFET switch drain and P-channel synchronous rectifier drain

Versions

ORDERING CODE	DESCRIPTION	OPERATING TEMPERATURE RANGE	PACKAGE TYPE	DEVICE MARKING	PIN CONFIGURATION
IDS-PM24A27	Output Voltage 2.7V	-40°C to 100°C	Thin SOT23-5	PA27	
IDS-PM24A30	Output Voltage 3.0V	-40°C to 100°C	Thin SOT23-5	PA30	
IDS-PM24A33	Output Voltage 3.3V	-40°C to 100°C	Thin SOT23-5	PA33	

Sales & Marketing EMEA

IDS Microchip AG
 Wächlenstrasse 5,
 CH-8832 Wollerau, Switzerland
 Phone: +41 43 844 6253
 Fax: +41 43 844 6250
sales@ids-microchip.com

Sales & Marketing Americas & Asia

IC Magic Inc.
 34 Granlea Rd,
 North York, ON M2N 2Z5, Canada
 Phone: +416 227 9196
 Fax: +41 43 844 6250
sales@ic-magic.com

www.ids-microchip.com

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