



MIC33M650 6A Step Down Module Eval Board

Part Number: DT100107

Summary

DT100107 evaluation boards are intended to provide a platform allowing customers to easily evaluate the features of the new MIC33M650 6A Power Modules in a buck converter application with adjustable output voltage through pin-strapping using on board jumpers. These boards are ideal for powering core supply voltages and also high power single-cell Li-ion battery powered applications. The evaluation boards also provide a reference for proper choice and PCB layout of components that are critical to switching regulator implementations. DT100107 were developed to help engineers reduce product design cycle time and have an optimum platform to evaluate the performance of these device. DT100107 provide onboard jumpers to easily set the VSEL1 and VSEL2 tristate pins to configure the output voltages requirements.

Package Contents

1x MIC33M650 6A Step Down Module Eva

Product Features

The DT100107 has the following features:

- 2.4V to 5.5V Input Voltage Range
- 6A (maximum) Continuous Output Current
- Programmable VSEL (Voltage Selection):
 - 9 voltage combinations of 2 three-state pins combinations
 - 0.6V, 0.8V, 0.9V, 1.0V, 1.2V, 1.5V, 1.8V, 2.5V, 3.3V output voltage
- High Efficiency (up to 95%)
- 2 MHz Switching Frequency
- $\pm 1.5\%$ Output Voltage Accuracy Over Line/Load/Temperature Range
- Supports Safe Start-Up with Pre-Biased Output
- Pull-Down when Disabled (typically 10Ω)
- Less than $10\ \mu\text{A}$ Shutdown Supply Current
- Low Dropout Operation (100% Duty Cycle)
- Ultra-Fast Transient Response
- Latch-Off Thermal Shutdown Protection
- Latch-Off Current Limit Protection
- Power Good Open-Drain Output