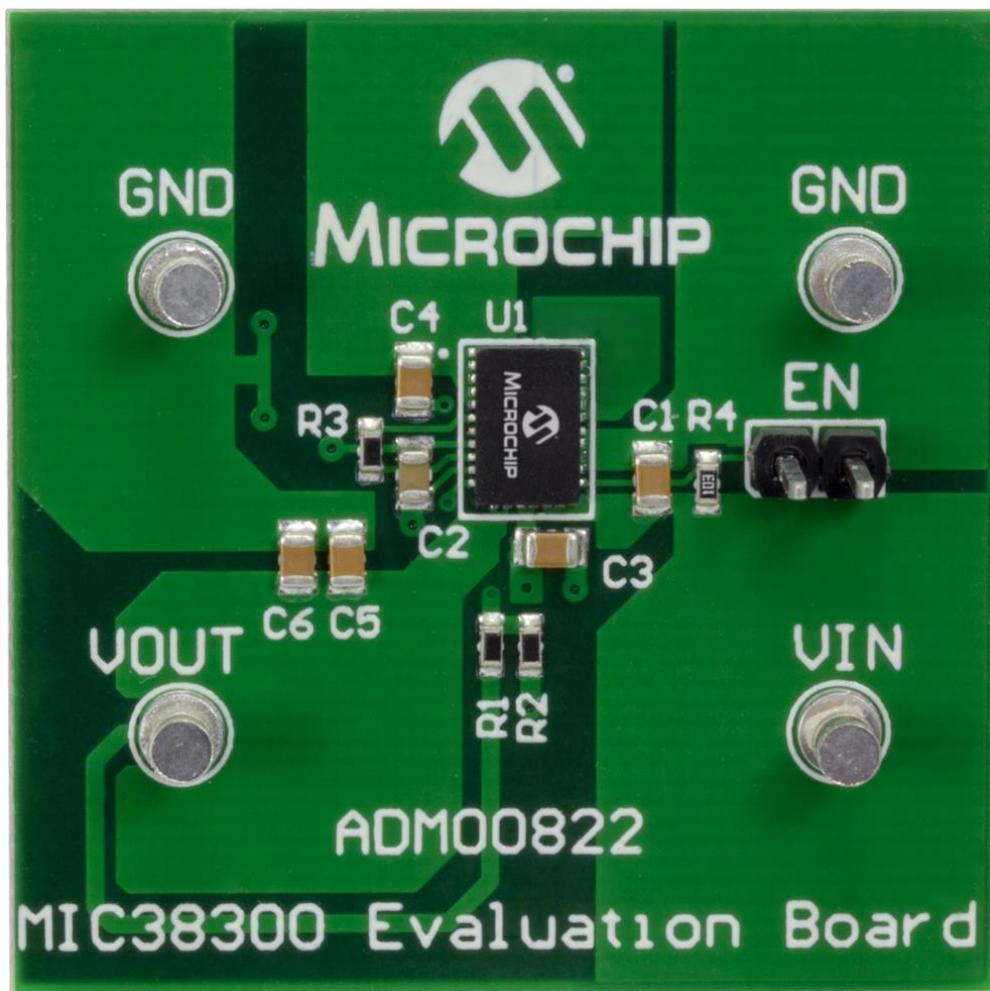




ADM00822 - MIC38300 HELDO Evaluation Board

Part Number: ADM00822



Summary:

The MIC38300 is a 3A peak, 2.2A continuous output current step down converter. This is the first device in a new generation of High Efficiency Low Dropout (HELDO®) regulators that provide the benefits of an LDO in respect to ease of use, fast transient performance, high PSRR and low noise while offering the efficiency of a switching regulator.

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As output voltages move lower, the output noise and transient response of a switching regulator become an increasing challenge for designers. By combining a switcher whose output is slaved to the input of a high performance LDO, high efficiency is achieved with a clean low noise output. The MIC38300 is designed to provide less than 5mV of peak to peak noise and over 70dB of PSRR at 1kHz. Furthermore, the architecture of the MIC38300 is optimized for fast load transients allowing to maintain less than 30mV of output voltage deviation even during ultra fast load steps, making the MIC38300 an ideal choice for low voltage ASICs and other digital ICs.

The MIC38300 features a fully integrated switching regulator and LDO combo, operates with input voltages from 3.0V to 5.5V input and offers adjustable output voltages down to 1.0V

Package Contents

1 x MIC38300 3A HELDO Evaluation Board

Product Features

Features:

- * 3A peak output current
- * 2.2A continuous operating current
- * Input voltage range: 3.0V to 5.5V
- * Adjustable output voltage down to 1.0V
- * Output noise less than 5mV
- * Ultra fast transient performance
- * Unique switcher plus LDO architecture
- * Fully integrated MOSFET switches
- * Micro-power shutdown
- * Easy upgrade from LDO as power dissipation becomes an issue
- * Thermal shutdown and current limit protection.