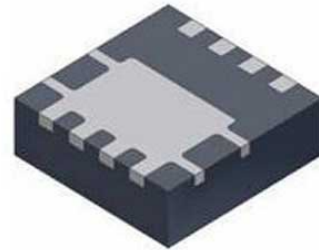


4MHZ PWM 1.2A INTERNAL INDUCTOR

Manufacturers	Microchip Technology, Inc
Package/Case	14-PowerTFDFN
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for MIC33153-SYHJ-TR or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The MIC33153 is a high-efficiency 4MHz 1.2A synchronous buck regulator with an internal inductor, HyperLight Load® mode, Power Good (PG) output indicator, and programmable soft start. HyperLight Load® provides very high efficiency at light loads and ultra-fast transient response which makes the MIC33153 perfectly suited for supplying processor core voltages. An additional benefit of this proprietary architecture is very low output ripple voltage throughout the entire load range with the use of small output capacitors. The MIC33153 is designed so that only two external capacitors as small as 2.2 μF are needed for stability. This gives the MIC33153 the ease of use of an LDO with the efficiency of a HyperLight Load® DC converter. The MIC33153 achieves efficiency in HyperLight Load® mode as high as 85% at 1mA, with a very low quiescent current of 22 μA . At higher loads, the MIC33153 provides a constant switching frequency up to 4MHz. The MIC33153 is available in 14-pin 3.0mm x 3.5mm package with an operating junction temperature range from -40°C to +125°C.

Features

Internal inductor

Simplifies design to two external capacitors

Input voltage: 2.7V to 5.5V

Output voltage: fixed or adjustable (0.62V to 3.6V)

Up to 1.2A output current

Up to 93% peak efficiency

85% typical efficiency at 1mA

Power Good (PG) output

Programmable soft start

22 μ A typical quiescent current

4MHz PWM operation in continuous mode

Ultra-fast transient response

Low ripple output voltage

35mVpp ripple in HyperLight Load[®] mode

7mV output voltage ripple in full PWM mode

0.01 μ A shutdown current

Thermal shutdown

Related Products



[MIC94325YMT-TR](#)

Microchip Technology, Inc
UDFN-6



[MIC4684YM](#)

Microchip Technology, Inc
SOIC-8



[MIC2009A-1YM6-TR](#)

Microchip Technology, Inc
SOT-23-6



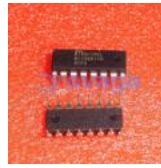
[MIC2090-1YM5-TR](#)

Microchip Technology, Inc
SOT-23-5



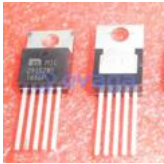
[MIC5841YWM-TR](#)

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SOIC-8