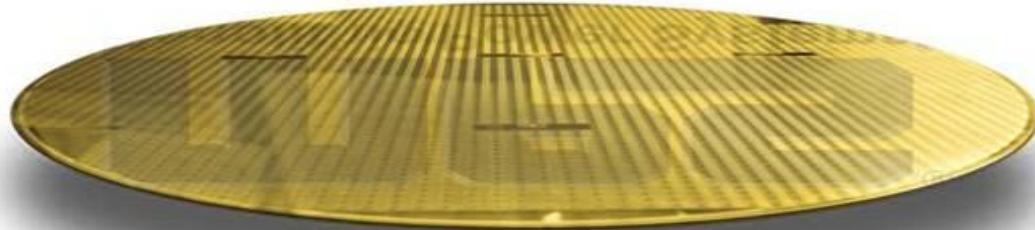


The Future of Analog Technology®

MPS®

Monolithic Power Systems



MP2155/28163

**2.2A/2.9A 5.5V High Efficiency, Single Inductor Buck-Boost Converter
in 3x3mm QFN10 Package**



MP2155/MP28163 High Efficiency Single Inductor Buck-Boost Converter with 2.2A/2.9A Switches

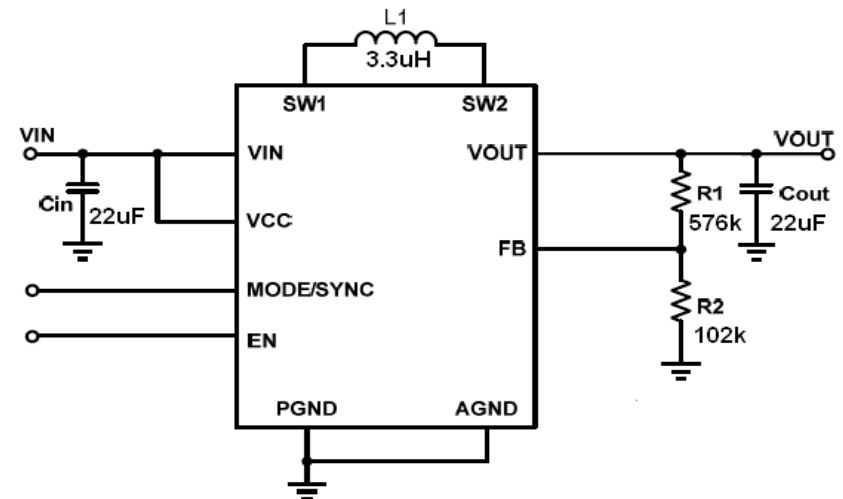
FEATURES

- High efficiency- up to 95%
- MP2155- 2.2A Switch Current Limit
- MP28163- 2.9A Switch Current Limit
- Load disconnect during shutdown
- Input voltage range: 2V to 5.5V
- Adjustable output voltage from 1.5V to 5V
- 1.2MHz switching frequency
- Power save mode at light load
- Quiescent current less than 80 μ A
- Internal loop compensation for fast response
- Internal soft start
- OTP SCP and OVP for output voltage
- Minimal external components
- Available in small 3x3mm QFN10 package

BENEFITS

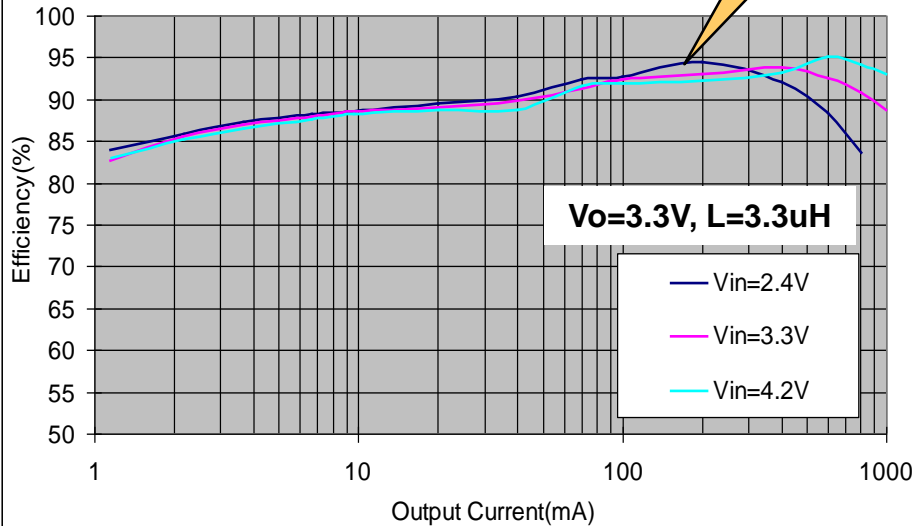
- Minimal external components – Suitable for limited space
- Low Iq – High light load efficiency, low standby power
- High Switching Frequency – smaller inductor size
- Smooth and reliable mode transition between buck boost

Typical Application

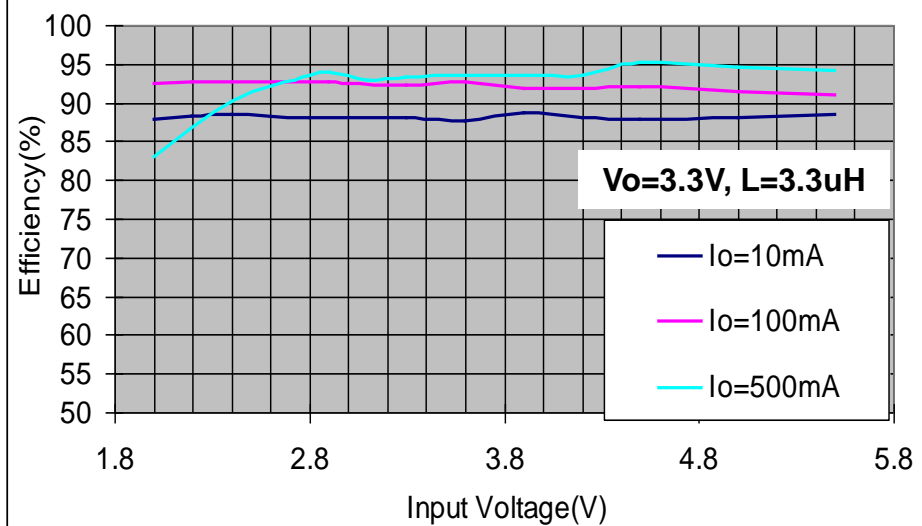


Up to 85% at LL and 95% peak

Efficiency vs. Output Current



Efficiency vs. Input Voltage



The efficiency is up to **95%**. Excellent light load efficiency

- **MP2155/MP28163 are high-efficiency, single inductor Buck-Boost converter. They target all battery-operated applications.**
- **The device provides up to 85% efficiency at 1mA load and up to 95% at full load.**
- **This is a very important feature for battery life.**