



SX0103M Power Module

Low Input Voltage 3A Buck Converter With I²C and Integrated Inductor

Features

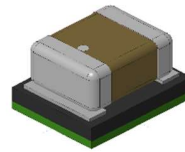
- VIN operation ranges from 2.2V to 5.5V
- Up to 3A Continuous Operating Current
- Very low quiescent current of 30uA at Light Loads
- Very low shutdown current, maximum 1uA
- Low Dropout voltage
- No thermal derating up to max load over operating temperature range
- I²C Programable VOUT ranges from 0.5V to 2.4V with 1% accuracy (CCM) over all operating line and temperature conditions
- IRQn to program I2C slave address with external resistor
- Programable modes of operation (PFM or Force PWM or 25KHz Limit for Low Acoustic noise applications)
- Dynamic Voltage Scaling
- Thermal, Over-Current, Short-Circuit, Under-Voltage, and Pre-Bias Protections
- Very Small, Fully Integrated With Well-Optimized Form Factor, Open-Top Module (2.4mm x 3.0mm x 1.97mm)

Module Form Factor

2.4 x 3.0 x 1.97mm 14L Open-Top Module
(with integrated IC + inductor)

Inductor: chip inductor

Die: Monolithic CMOS

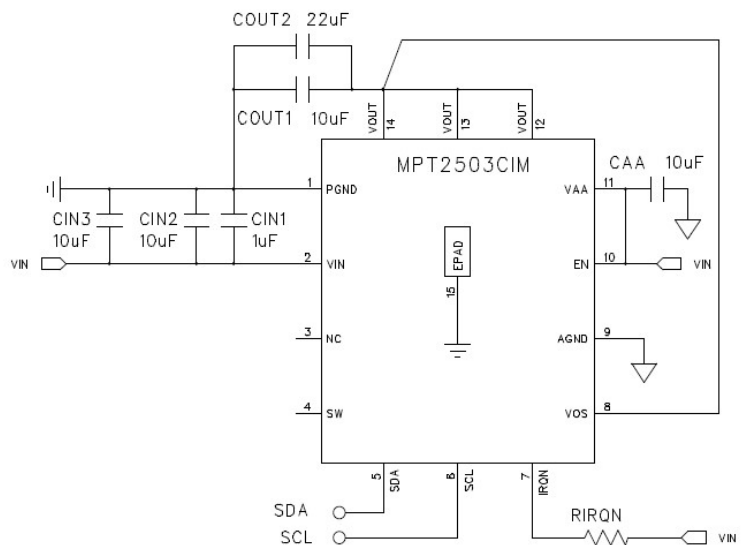
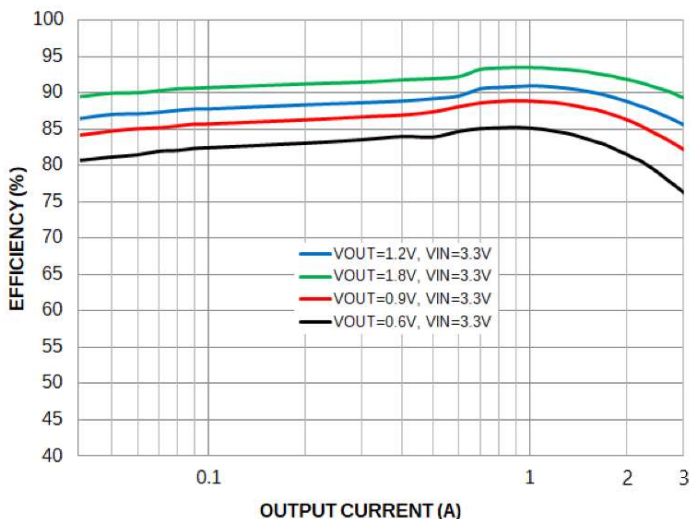


Applications

- Highly Space Constraint, High Power Density applications with Ease of Use
- Optical Modules and Optical Networks
- Handheld Devices
- Medical devices and Patient Monitoring devices
- Test and Measurement
- Instrumentation
- Telecommunication

Typical Performance Characteristics

Efficiency over DC Load (PFM Enabled in Light Load)



Typical Application Circuit