CNS1302

(1.5MHz 2A High ŋ Step-Down Converter in DFN16*16 Package)

1 Features

- ŋ up to 96%
- Up to 2A Max Output Current
- 1.5MHz Frequency
- Internal Compensation
- Clock Dithering
- Tiny DFN1616 Package

2 Applications

- USB ports/Hubs
- Hot Swaps
- Cellphones
- Tablet PC
- Set Top Boxes

3 DESCRIPTION

The CNS1302 is a high-efficiency, DC-to-DC step-down switching regulator, capable of delivering up to 2A of output current. The devices operate from an input voltage range of 2.6V to 5.5V and provide output voltages from 0.6V to VIN, making the CNS1302 ideal for low voltage power conversions. Running at a fixed frequency of 3MHz allows the use of small inductance value and low DCR inductors, thereby achieving higher efficiencies. Other external components, such as ceramic input and output caps, can also be small due to higher switching frequency, while maintaining exceptional low noise output voltages. Built-in EMI reduction circuitry makes this converter ideal power supply for RF applications. Internal soft-start control circuitry reduces inrush current. Short-circuit and thermal-overload protection improves design reliability.CNS1302 is housed in a tiny DFN1616 package

Simplified Schematic