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MP8004
13W 802.3af PoE Powered Device Interface with Flyback DC-DC Converter

DESCRIPTION

The MP8004 is an integrated IEEE 802.3af PoE compliant Powered Device (PD) power supply solution. It includes a PD interface and an isolated/non-isolated flyback converter.

The PD interface includes detection and classification modes as well as a 100V output pass device. Inrush current limit is included to slowly charge the input capacitor without interruption due to die heating.

The DC-DC converter includes a 150V power switch and is capable of delivering 13W PoE power with high efficiency. It has an internal soft-start, auto-retry, and incorporates over current, short circuit, and over voltage protection. It can also skip cycles to maintain zero load regulation.

The MP8004 can support a front-end solution for PoE-PD application with minimum external components, and is available in thermally enhanced 4x6mm QFN20 package.

FEATURES

- Meets IEEE 802.3af Specifications
- 100V, 1 Ω Integrated Pass Switch
- 420mA DC Input Current Limit
- 150V, 0.45 Ω Integrated Switch for Power Converter
- Cycle-by-Cycle Switching Current Limit
- Integrated 100V Startup Circuit
- Programmable Switching Frequency
- Duty Cycle Limiting with Line Feed Forward
- Internal Slope Compensation
- OCP, SCP and OTP Protection
- 4x6mm QFN20 Package

APPLICATIONS

- VoIP Telephones
- Security Camera Systems
- Wireless Access Points/Wireless LAN
- Small-cell Base Stations
- Safety Backup Power
- Remote Internet Power

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TYPICAL APPLICATION

