

JWH5085A

16V/12A Synchronous Step-Down Converter

DESCRIPTION

The JWH5085A is a monolithic buck switching regulator based on I2 architecture for fast transient response. Operating with an input range of 2.7V~16V, JWH5085A delivers 12A of continuous output current with two integrated N-Channel MOSFETs. The internal synchronous power switches provide high efficiency without the use of an external Schottky diode. The operation frequency is set easily to 700 kHz, 800 kHz, or 1000 kHz with the MODE configuration, allowing the JWH5085A frequency to remain constant regardless of the input and output voltages.

JWH5085A guarantees robustness with output short protection, over-voltage protection, thermal protection and under voltage protection.

JWH5085A is available in QFN3X4-21 package, which provides a compact solution with minimal external components.

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FEATURES

- 2.7V to 16V Operating Input Range with External 3.3V VCC Bias
- 4V to 16V Operating Input Range with Internal Bias or External 3.3V VCC Bias
- 12A output current
- Differential Output Voltage Remote Sense
- Programmable Accurate Current Limit Level
- $\pm 0.5\%$ Reference Voltage over 0° C to +70 $^{\circ}$ C Junction Temperature Range
- FCCM Operation Mode
- Power Good Indicator
- Programmable Soft-Start Time
- Selectable Switching Frequency from 700kHz, 800kHz, and 1000kHz
- Output Discharge Function
- Non-Latch OCP, UVP, OVP, UVLO
- Thermal Protection
- Available in QFN3X4-21 Package

APPLICATIONS

- Telecom and Networking Systems
- Server, Cloud-Computing, Storage
- Base Stations
- General Purpose Point-of-Load

TYPICAL APPLICATION

