

■ General Description

AME5961 is a fully integrated high efficiency synchronous step-down converter capable of delivering up to 8A of output current. It employs an adaptive COT control providing a fast transient response. It can operate over a wide input voltage range from 4V to 24V.

AME5961 provides multiple functions for more design flexibility. The selectable current limit and light load operation mode mark AME5961 suitable for a wide range of applications. Externally configurable soft start reduces inrush current.

AME5961 also provides UVLO, OCP and OTP protection functions. It's available in the FCQFN-16D (2.5mm x 2.5mm x 0.55 mm) package.

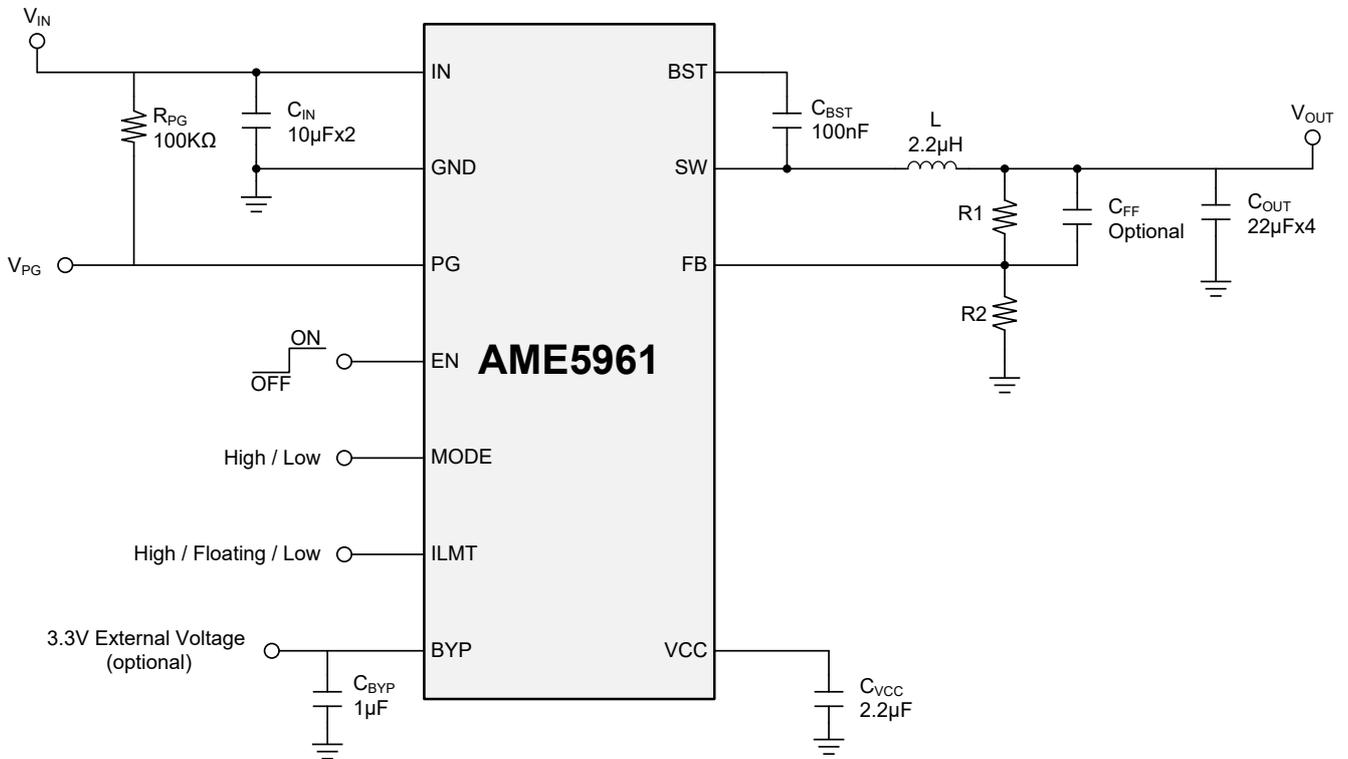
■ Application

- Networking Systems
- Flat Panel Monitors
- Laptop Computer
- Table PC

■ Features

- Input Voltage Range: 4.0V to 24V
- Output Voltage Range: 0.6V to 5.5V
- $\pm 1\%$, 0.6V Feedback Voltage Accuracy
- 8A Continuous Load Current Capability
- Low $R_{DS(ON)}$ Internal Switches (High/Low Side): 20m Ω / 10m Ω
- Adaptive COT Control
- Ultra-Fast Load Transient Response
- Selectable PSM and Forced PWM Mode
- Power Good Indicator
- 600kHz Switching Frequency
- Internal Input Under-Voltage Lockout Protection
- Internal Over Temperature Protection
- Auto-Recovery Mode Output Over Voltage Protection
- Hiccup Mode Output Under Voltage Protection
- RoHS, Halogen Free & TSCA Compliance

■ **Typical Application Schematic**





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Life Support Policy:

These products of AME, Inc. are not authorized for use as critical components in life-support devices or systems, without the express written approval of the president of AME, Inc.

AME, Inc. reserves the right to make changes in the circuitry and specifications of its devices and advises its customers to obtain the latest version of relevant information.

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