

■ General Description

The AME5290 is a synchronous buck converter with internal power MOSFETs. It achieves 3A continuous output current with a fixed frequency of 1MHz with excellent load and line regulation. The device operates from an input voltage of 3V to 5.5V and provides an output voltage from 0.8V to V_{IN} , making the AME5290 ideal for on-board post regulation applications.

Internal soft-start minimizes the inrush supply current at startup. The circuit protection includes cycle-by-cycle current limiting, output short circuit frequency protection and thermal shutdown these protect functions improve design reliability.

This device is available in SOP-8/PP package with exposed pad for low thermal resistance.

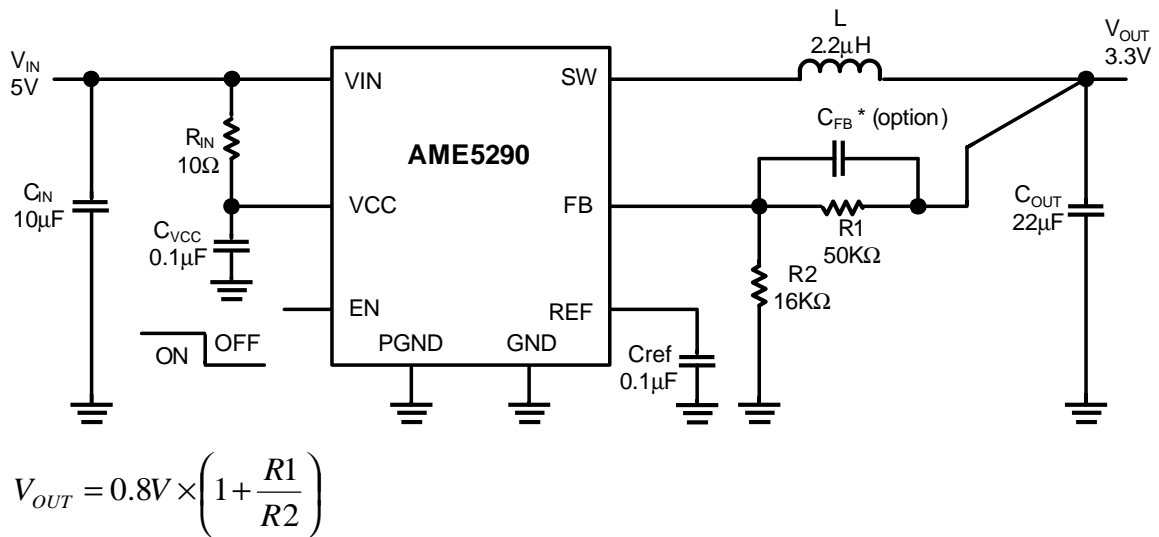
■ Features

- Input Voltage Operate from 3V to 5.5V
- 3A Output Current
- 100m Ω Internal Power MOSFET Switch
- Stable with Low ESR Output Ceramic Capacitors
- Up to 95% Efficiency
- Thermal Shutdown
- Output Adjustable from 0.8V to V_{IN}
- Short Circuit Frequency Protection
- Over Temperature Protection
- Available in SOP-8/PP Package
- Green Products Meet RoHS Standards

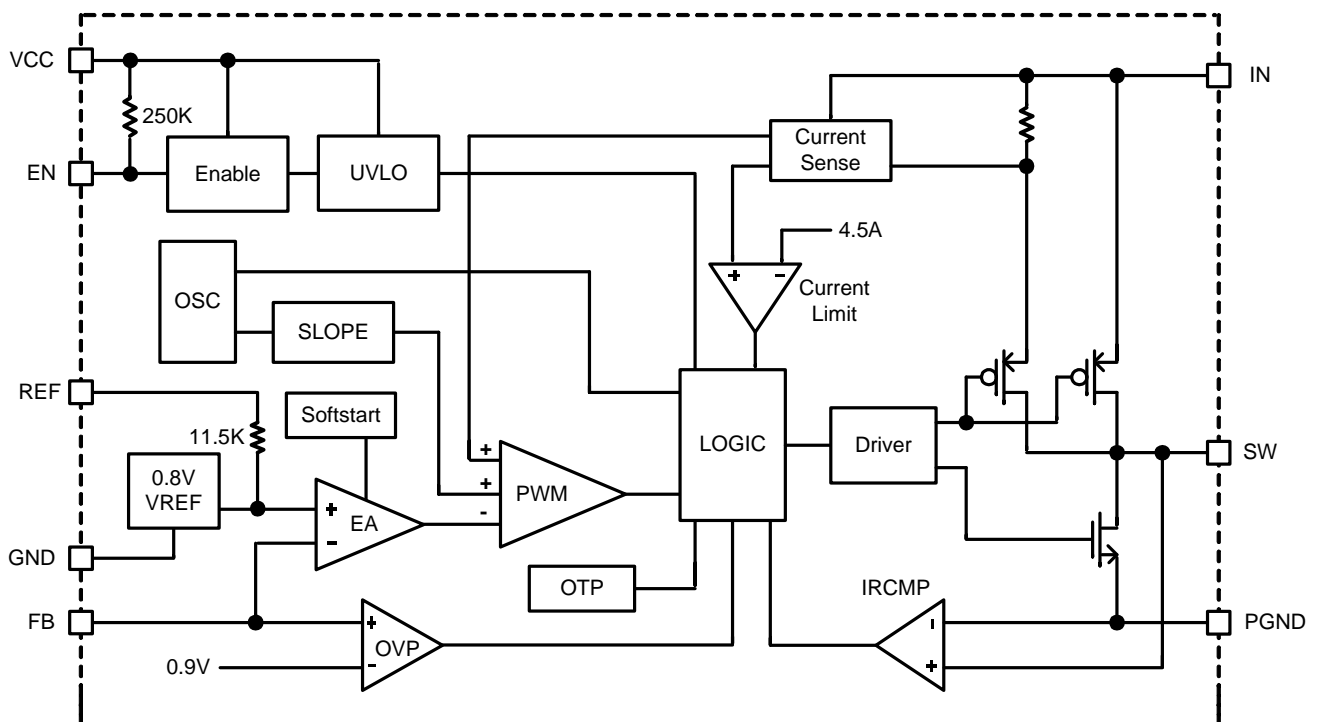
■ Applications

- TV
- Distributed Power Systems
- Pre-Regulator for Linear Regulators

■ Typical Operating Circuit



■ Functional Block Diagram





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Life Support Policy:

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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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