MAX20048EVKIT

Evaluation Kit for the MAX20048

Description

The MAX20048 evaluation kit (EV kit) is a fully assembled and tested application circuit for the MAX20048 currentmode buck-boost controller IC. The EV kit is designed to deliver up to 16A (max) input current with input voltages from 2V to 36V. The output-voltage accuracy is ±2% within the normal 9V to 18V operation input range and a ±3% accuracy in the 2V to 18V range. Voltage quality can be monitored by observing the PGOOD signal.

The IC offers 5V fixed output voltage and a 4V to 25V OUT programmable range. Switching frequency is adjustable from 220kHz to 2.2MHz, which allows for small external components, reduced output ripple, and guarantees no AM interference. The IC automatically enters skip mode at light loads with low 55µA quiescent current at no load. The IC comes with a spread-spectrum frequency-modulation option designed to minimize EMI-radiated emissions and a SYNCOUT option that outputs 180° out-of-phase clock.

Key Features

- 2V to 36V Input Supply Range
- Delivers Up to 16A Input Current
- Enable Input
- Frequency Synchronization Input
- Voltage-Monitoring PGOOD Output
- BIAS Voltage-Monitoring Test Point
- Fully Assembled and Tested
- Proven PCB Layout

Applications/Uses

- Instrument Cluster
- Point of Load Power Supply
- Remote Display
- Start-Stop Systems
- USB Power

Device	Fab Process	Technology	Sample size	Rejects	FIT at 25°C	FIT at 55°C
MAX20048EVKIT#*	Contact reliability engineer for information					

Note : The failure rates are summarized by technology and mapped to the associated material part numbers. The failure rates are highly dependent on the number of units tested.