

Power Factor Correction and PWM Controller 200kHz 8-Pin SOIC Tube



Images are for reference only

[Inquiry](#)

Manufacturer: [Texas Instruments, Inc](#)

Package/Case: SOP-8

Product Type: Power Management ICs

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

General Description

The UCC38050 and UCC38051 are PFC controllers for low-to-medium power applications requiring compliance with IEC 1000-3-2 harmonic reduction standard. The controllers are designed for a boost preregulator operating in transition mode (also referred to as boundary-conduction mode or critical conduction-mode operation). They feature a transconductance voltage amplifier for feedback error processing, a simple multiplier for generating a current command proportional to the input voltage, a current-sense (PWM) comparator, PWM logic, and a totem-pole driver for driving an external FET.

In the transition mode operation, the PWM circuit is self-oscillating, with the turnon being governed by an inductor zero-current detector (ZCD pin), and the turnoff being governed by the current-sense comparator. Additionally, the controller provides features such as peak current limit, default timer, overvoltage protection (OVP) and enable.

Key Features

Transition Mode PFC Controller for Low Implementation Cost

Industry Pin Compatibility With Improved Feature Set

Improved Transient Response With Slew-Rate Comparator

Zero Power Detect to Prevent Overvoltage Protection (OVP) During Light Load Conditions

Accurate Internal VREF for Tight Output Regulation

Two UVLO Options

OVP, Open-Feedback Protection, and Enable Circuits

±750-mA Peak Gate Drive Current

Low Start-Up and Operating Currents

Lead (Pb)-Free Packages

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Recommended For You

UCC28064ADR

Texas Instruments, Inc

SOP16

UC3637N

Texas Instruments, Inc

DIP-18

UCC27517DBVR

Texas Instruments, Inc

SOT23-5

UCC2946IPWRQ1

Texas Instruments, Inc

TSSOP8

UCC28730QDRQ1

Texas Instruments, Inc

SOP7

UCC21222QDRQ1

Texas Instruments, Inc

SOP16

UCD9090QRGZRQ1

Texas Instruments, Inc

VQFN-48

UCC27531QDBVRQ1

Texas Instruments, Inc

SOT23-6

UCC27511AQDBVRQ1

Texas Instruments, Inc

SOT23-6

UCC2803QDRQ1

Texas Instruments, Inc

SOP8

UCC28951QPWRQ1

Texas Instruments, Inc

TSSOP24

UCC21320QDWKRQ1

Texas Instruments, Inc

SOIC-14

UCC27322QDGNRQ1

Texas Instruments, Inc

HVSSOP-8

UCC28950QPWRQ1

Texas Instruments, Inc

TSSOP24

UCC2808AQDR-2Q1

Texas Instruments, Inc

SOP8