UCC28064ADR

Power Factor Controller 500kHz 16-Pin SOIC T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	SOP16
Product Type:	Power Management ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active

UCC28064ADR Image

Images are for reference only

Inquiry

General Description

The UCC28064A interleaved PFC controller has higher power ratingsthan previously possible. The device uses a Natural Interleaving technique. Both channels operateas masters (there is no slave channel) synchronized to the same frequency. This approach enablesfaster response time, excellent phase-to-phase on-time matching, and transition mode operation foreach channel. The device has a burst mode function to get high light-load efficiency. Burst modeeliminates the need to turn off the PFC during light load operation to meet standby power targets.Burst mode eliminates the need for an auxiliary flyback converter when paired with UCC25630x LLCcontroller and the UCC24624 synchronous rectifier controller.

Expanded system level protections features include input brownout and dropout recovery,output over-voltage, open-loop, overload, soft-start, phase-fail detection, and thermal shutdown.The additional fail-safe over-voltage protection (OVP) feature protects against shorts to anintermediate voltage that, if undetected, could lead to catastrophic device failure. Advancednon-linear gain results in rapid, yet smooth response to line and load transient events. Specialline-dropout handling avoids significant current disruption. Strong reduction of bias current whennot switching during burst mode operation, improves stand-by performance.

Key Features

Inputfilter and output capacitor ripple-current reduction
Reduced current ripplefor higher system reliability and smaller bulk capacitor

Reduced EMI filtersize

High light-loadefficiency
User adjustable phase management with input voltage compensation

Burst mode operation with adjustable burst threshold

Helps enable compliance to EUP Lot6 Tier II, CoC Tier II and DOE Level VIstandards

Sensorless current-shaping simplifies boardlayout and improves efficiency

Input line feed-forward for fast line transientresponse

Inrush-safe current limiting:
Prevents MOSFETconduction during inrush

Eliminates CCM operation and reverse recovery eventsin output rectifier

Operating temperature range –40°Cto +125°C in a 16-pin SOIC package

Create a Custom Design Using the UCC28064A With theWEBENCH? PowerDesigner

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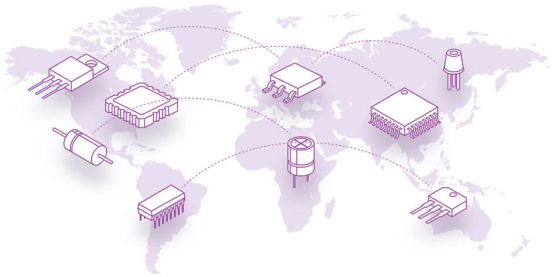

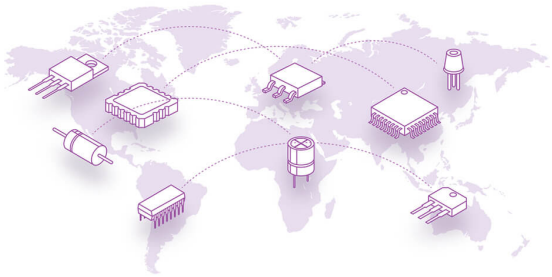

Recommended For You

UC3637N

Texas Instruments, Inc

DIP-18

UCC27517DBVR

Texas Instruments, Inc

SOT23-5

UCC2946TPWRQ1

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

UCC27524AQDRQ1

Texas Instruments, Inc

SOP8