

UC2843D

Current Mode PWM Controller 200mA 500kHz 14-Pin SOIC Tube

Manufacturer:	Texas Instruments, Inc
Package/Case:	SOP14
Product Type:	Power Management ICs
RoHS:	RoHS Compliant/Lead free W
Lifecycle:	Active



Images are for reference only

Inquiry

General Description

The UCx84x series of control integrated circuits provide the features that are necessary to implement off-line or DC-to-DC fixed-frequency current-mode control schemes, with a minimum number of external components. The internally implemented circuits include an undervoltage lockout (UVLO), featuring a start-up current of less than 1 mA, and a precision reference trimmed for accuracy at the error amplifier input. Other internal circuits include logic to ensure latched operation, a pulse-width modulation (PWM) comparator that also provides current-limit control, and a totem-pole output stage that is designed to source or sink high-peak current. The output stage, suitable for driving N-channel MOSFETs, is low when it is in the off state. The UCx84x family offers a variety of package options, temperature range options, choice of maximum duty cycle, and choice of turnon and turnoff thresholds and hysteresis ranges. Devices with higher turnon or turnoff hysteresis are ideal choices for off-line power supplies, while the devices with a

narrower hysteresis range are suited for DC-DC applications. The UC184x devices are specified for operation from -55°C to 125°C, the UC284x series is

specified for operation from -40°C to 85°C, and the UC384x series is specified for operation from 0°C to 70°C.

Key Features

Optimized for Off-Line and DC-to-DC Converters Low Start-Up Current (< 1 mA) Automatic Feedforward Compensation Pulse-by-Pulse Current Limiting Enhanced Load-Response Characteristics Undervoltage Lockout With Hysteresis Double-Pulse Suppression High-Current Totem-Pole Output Internally Trimmed Bandgap Reference Up to 500-kHz Operation Error Amplifier With Low Output Resistance

Description

The UCx84x series of control integrated circuits provide the features that are necessary to implement off-line or DC-to-DC fixed-frequency current-mode control schemes, with a minimum number of external components. The internally implemented circuits include an undervoltage lockout (UVLO), featuring a start-up current of less than 1 mA, and a precision reference trimmed for accuracy at the error amplifier input. Other internal circuits include logic to ensure latched operation, a pulse-width modulation (PWM) comparator that also provides current-limit control, and a totem-pole output stage that is designed to source or sink high-peak current. The output stage, suitable for driving N-channel MOSFETs, is low when it is in the off state. The UCx84x family offers a variety of package options, temperature range options, choice of maximum duty cycle, and choice of turnon and turnoff thresholds and hysteresis ranges. Devices with higher turnon or turnoff hysteresis are ideal choices for off-line power supplies, while the devices with a

thresholds and hysteresis ranges. Devices with higher turnon or turnoff hysteresis are ideal choices for off-line power supplies, while the devices with a narrower hysteresis range are suited for DC-DC applications. The UC184x devices are specified for operation from -55° C to 125° C, the UC284x series is specified for operation from -40° C to 85° C, and the UC384x series is specified for operation from 0° C to 70° C.

Recommended For You

UCC28064ADR	UC3637N	UCC27517DBVR
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
SOP16	DIP-18	SOT23-5
UCC2946TPWRQ1	UCC28730QDRQ1	UCC21222QDRQ1
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
TSSOP8	SOP7	SOP16
UCD9090QRGZRQ1	UCC27531QDBVRQ1	UCC27511AQDBVRQ1
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
VQFN-48	SOT23-6	SOT23-6

UCC2803QDRQ1

Texas Instruments, Inc

SOP8

UCC27322QDGNRQ1

Texas Instruments, Inc

HVSSOP-8

UCC28951QPWRQ1

Texas Instruments, Inc

TSSOP24

UCC28950QPWRQ1

Texas Instruments, Inc TSSOP24

UCC21320QDWKRQ1

Texas Instruments, Inc SOIC-14

UCC2808AQDR-2Q1

Texas Instruments, Inc SOP8