

# **UC3843BD1G**

Data Sheet

High Performance Current Mode Controllers, Current Mode PWM Controllers 52kHz 1A Current PWM w/96% Duty Cycle Max

Manufacturers ON Semiconductor, LLC

Package/Case SOP-8

Product Type Power Management ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for UC3843BD1G or Email to us: sales@ovaga.com We will contact you in 12 hours.



## **General Description**

The UC284xB family of control ICs provides the necessary features to implement off-line or DC to DC fixed frequency current mode control schemes with a minimal external parts count. Internally implemented circuits include a trimmed oscillator for precise DUTY CYCLE CONTROL under voltage lockout featuring start-up current less than 0.5mA, a precision reference trimmed for accuracy at the error amp input, logic to insure latched operation, a PWM comparator which also provides current limit control, and a totem pole output stage designed to source or sink high peak current. The output stage, suitable for driving N-Channel MOSFETs, is low in the off-state.

Differences between members of this family are the under-voltage lockout thresholds and maximum duty cycle ranges. The UC2842B and UC2844B have UVLO thresholds of 16V (on) and 10V (off), ideally suited off-line applications. The corresponding thresholds for the UC2843B and UC2845B are 8.5V and 7.9V. The UC2842B and UC2843B can operate to duty cycles approaching 100%. A range of the zero to <50% is obtained by the UC2844B and UC2845B by the addition of an internal toggle flip flop which blanks the output off every other clock cycle.

## **Features** Application

LOWSTART-UPANDOPERATINGCURRENT

**ONSEMI** 

UNDERVOLTAGELOCKOUTWITHHYSTERESIS

INTERNALLYTRIMMEDREFERENCEWITHUNDERVOLTAGELOCKOUT

**CURRENTLIMITING** 

TRIMMEDOS CILLATORFOR PRECISE FREQUENCY CONTROL

CURRENTMODEOPERATIONTO500kHz

OSCILLATORFREQUENCYGUARANTEEDAT250kHz

LATCHINGPWMFORCYCLE-BY-CYCLE

HIGHCURRENTTOTEMPOLEOUTPUT

AUTOMATICFEEDFORWARDCOMPENSATION



#### **Related Products**



UC3843BVD1R2G

ON Semiconductor, LLC SOP-8



**UC2843BD1R2G** 

ON Semiconductor, LLC SOIC-8



<u>UC3844BDG</u>

ON Semiconductor, LLC SOIC-14



<u>UC3845BVD1R2G</u>

ON Semiconductor, LLC SOP-8(3.9)



3000 ga

**UC3843BDR2G** 

ON Semiconductor, LLC

SOIC-14

UC3843BVDG

ON Semiconductor, LLC

SOIC-14



### UC3844BVDG

ON Semiconductor, LLC

SOIC-14

### FAN48630UC50X

ON Semiconductor, LLC

WLCSP-16

