

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

|               |                                       |
|---------------|---------------------------------------|
| Manufacturers | <a href="#">ON Semiconductor, LLC</a> |
| Package/Case  | SOIC-8                                |
| Product Type  | Power Management ICs                  |
| RoHS          |                                       |
| Lifecycle     |                                       |



Images are for reference only

Please submit RFQ for UC2843BD1R2G or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## 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

LOW START-UP AND OPERATING CURRENT

UNDERVOLTAGE LOCKOUT WITH HYSTERESIS

INTERNALLY TRIMMED REFERENCE WITH UNDERVOLTAGE LOCKOUT

CURRENT LIMITING

TRIMMED OSCILLATOR FOR PRECISE FREQUENCY CONTROL

CURRENT MODE OPERATION TO 500 kHz

OSCILLATOR FREQUENCY GUARANTEED AT 250 kHz

LATCHING PWM FOR CYCLE-BY-CYCLE

HIGH CURRENT TO TEMPOLE OUTPUT

AUTOMATIC FEED-FORWARD COMPENSATION

## Application

ON-SEMI



## Related Products



### [UC3843BVD1R2G](#)

ON Semiconductor, LLC  
SOP-8



### [UC3844BDG](#)

ON Semiconductor, LLC  
SOIC-14



### [UC3845BVD1R2G](#)

ON Semiconductor, LLC  
SOP-8(3.9)



### [UC3843BDR2G](#)

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SOIC-14



[UC3843BD1G](#)

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[UC3844BVDG](#)

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[UC3843BVDG](#)

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SOIC-14



[FAN48630UC50X](#)

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WLCSP-16