



Data Sheet

1A, 52kHz 250khz Max Current Mode PWM Control Circuit with 16V UVLO Threshold and 48% Max Duty Cycle33333333333; Package: SOIC 14 LEAD; No of Pins: 14; Container: Rail; Qty per Container: 55

Manufacturers

ON Semiconductor, LLC

Package/Case

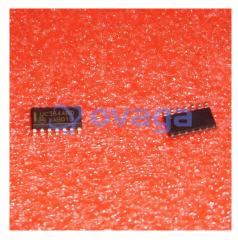
SOIC-14

Product Type

Power Management ICs

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for UC3844BDG or Email to us: sales@ovaga.com We will contact you in 12 hours.

<u>RFQ</u>

## **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** 

TRIMMEDOSCILLATORFOR PRECISE FREQUENCY CONTROL

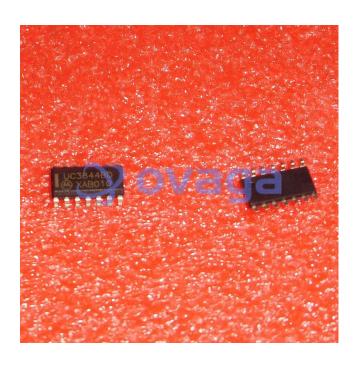
CURRENTMODEOPERATIONTO500kHz

OSCILLATORFREQUENCYGUARANTEEDAT250kHz

LATCHINGPWMFORCYCLE-BY-CYCLE

HIGHCURRENTTOTEMPOLEOUTPUT

AUTOMATICFEEDFORWARDCOMPENSATION



**Related Products** 



ON Semiconductor, LLC SOP-8

**UC3843BVD1R2G** 



UC2843BD1R2G
ON Semiconductor, LLC
SOIC-8



UC3845BVD1R2G
ON Semiconductor, LLC
SOP-8(3.9)



ON Semiconductor, LLC SOIC-14

UC3843BDR2G



UC3843BD1G
ON Semiconductor, LLC
SOP-8



UC3843BVDG
ON Semiconductor, LLC
SOIC-14



UC3844BVDG

ON Semiconductor, LLC

SOIC-14



FAN48630UC50X

ON Semiconductor, LLC

WLCSP-16