

# **UC3842BDG**

Data Sheet

PWM Controller, 25V-12V supply, 250 kHz, 13.4V/12mA out, SOIC-14

Manufacturers	ON Semiconductor, LLC	
Package/Case	SOIC-14	Stor Sec.
Product Type	Power Management ICs	and the second sec
RoHS		
Lifecycle		Images are for reference only
Please submit RFQ for UC3842BDG or <u>Email to us: sales@ovaga.com</u> 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

LOWSTART-UPANDOPERATINGCURRENT

UNDERVOLTAGELOCKOUTWITHHYSTERESIS

INTERNALLYTRIMMEDREFERENCE WITH UNDER VOLTAGELOCKOUT

CURRENTLIMITING

TRIMMEDOSCILLATORFORPRECISEFREQUENCYCONTROL

CURRENTMODEOPERATIONTO500kHz

OSCILLATORFREQUENCYGUARANTEEDAT250kHz

LATCHINGPWMFORCYCLE-BY-CYCLE

HIGHCURRENTTOTEMPOLEOUTPUT

AUTOMATICFEEDFORWARDCOMPENSATION

### **Related Products**



UC3843BVD1R2G ON Semiconductor, LLC SOP-8



UC2843BD1R2G ON Semiconductor, LLC SOIC-8



ON Semiconductor, LLC SOIC-14

UC3843BDR2G

**UC3844BVDG** 



ON Semiconductor, LLC SOIC-14



# <u>UC3844BDG</u>

ON Semiconductor, LLC SOIC-14

### UC3845BVD1R2G

ON Semiconductor, LLC SOP-8(3.9)

### UC3843BD1G

ON Semiconductor, LLC SOP-8

### UC3843BVDG

ON Semiconductor, LLC SOIC-14

Application

ONSEMI