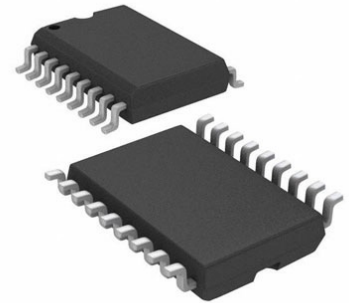


Voltage Mode PWM Controller 100mA 650kHz 18-Pin SOIC**Tube**

Images are for reference only

[Inquiry](#)**Manufacturer:** [Texas Instruments, Inc](#)**Package/Case:** SOP18**Product Type:** Power Management ICs**RoHS:** RoHS Compliant/Lead free **Lifecycle:** Active**General Description**

The UC1526 is a high performance monolithic pulse width modulator circuit designed for fixed-frequency switching regulators and other power control applications. Included in an 18-pin dual-in-line package are a temperature compensated voltage reference, sawtooth oscillator, error amplifier, pulse width modulator, pulse metering and setting logic, and two low impedance power drivers. Also included are protective features such as soft-start and under-voltage lockout, digital current limiting, double pulse inhibit, a data latch for single pulse metering, adjustable deadtime, and provision for symmetry correction inputs. For ease of interface, all digital control ports are TTL and B-series CMOS compatible. Active LOW logic design allows wired-OR connections for maximum flexibility. This versatile device can be used to implement single-ended or push-pull switching regulators of either polarity, both transformerless and transformer coupled. The UC1526 is characterized for operation over the full military temperature range of -55°C to +125°C. The UC2526 is characterized for operation from -25°C to +85°C, and the UC3526 is characterized for operation from 0° to +70°C.

Key Features

Reduced Supply Current

Oscillator Frequency to 600kHz

Precision Band-Gap Reference

7 to 35V Operation

Dual 200mA Source/Sink Outputs

Minimum Output Cross-Conduction

Double-Pulse Suppression Logic

Under-Voltage Lockout

Programmable Soft-Start

Thermal Shutdown

TTL/CMOS Compatible Logic Ports

5 Volt Operation ($V_{IN} = V_C = V_{REF} = 5.0V$)

Description

The UC1526A Series are improved-performance pulse-width modulator circuits intended for direct replacement of equivalent non- $\times 93A \times 94$ versions in all applications. Higher frequency operation has been enhanced by several significant improvements including: a more accurate oscillator with less minimum dead time, reduced circuit delays (particularly in current limiting), and an improved output stage with negligible cross-conduction current. Additional improvements include the incorporation of a precision, band-gap reference generator, reduced overall supply current, and the addition of thermal shutdown protection.

Along with these improvements, the UC1526A Series retains the protective features of under-voltage lockout, soft-start, digital current limiting, double pulse suppression logic, and adjustable deadtime. For ease of interfacing, all digital control ports are TTL compatible with active low logic.

Five volt (5V) operation is possible for $\times 93$ logic level $\times 94$ applications by connecting V_{IN} , V_C and V_{REF} to a precision 5V input supply. Consult factory for additional information.

Recommended For You

UCC28064ADR

Texas Instruments, Inc

SOP16

UC3637N

Texas Instruments, Inc

DIP-18

UCC27517DBVR

Texas Instruments, Inc

SOT23-5

UCC2946IPWRQ1

Texas Instruments, Inc

TSSOP8

UCC28730QDRQ1

Texas Instruments, Inc

SOP7

UCC21222QDRQ1

Texas Instruments, Inc

SOP16

UCD9090QRGZRQ1

Texas Instruments, Inc

VQFN-48

UCC27531QDBVRQ1

Texas Instruments, Inc

SOT23-6

UCC27511AQDBVRQ1

Texas Instruments, Inc

SOT23-6

UCC2803QDRQ1

Texas Instruments, Inc
SOP8

UCC28951QPWRQ1

Texas Instruments, Inc
TSSOP24

UCC21320QDWKRQ1

Texas Instruments, Inc
SOIC-14

UCC27322QDGNRQ1

Texas Instruments, Inc
HVSSOP-8

UCC28950QPWRQ1

Texas Instruments, Inc
TSSOP24

UCC2808AQDR-2Q1

Texas Instruments, Inc
SOP8