

Resonant Controllers 100mA 300kHz 20-Pin PDIP Tube

Manufacturer: <u>Texas Instruments, Inc</u>

Package/Case: DIP20

Product Type: Power Management ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

Inquiry

General Description

The UC3879 controls a bridge power stage by phase shifting the switching of one half-bridge with respect to the other. This allows constant frequency pulse width modulation in combination with resonant, zero-voltage switching for high efficiency performance. The UC3879 can be configured to provide control in either voltage mode or current mode operation, with overcurrent shutdown for fast fault protection.

Independently programmable time delays provide dead-time at the turn-on of each output stage, allowing time for each resonant switching interval. With the oscillator capable of operating in excess of 600 kHz, overall output switching frequencies to 300 kHz are practical. In addition to the standard free running mode, with the CLKSYNC pin, the user may configure the UC3879 to accept an external clock synchronization signal. Alternatively, up to three units can be locked together with the operational frequency determined by the fastest device.

Protective features include an undervoltage lockout and overcurrent protection. Additional features include a 10-MHz error amplifier, a 5-V precision reference, and soft start. The UC3879 is available in 20 pin N, J, DW, and Q and 28 pin L packages.

Key Features

Programmable Output Turn On Delay; Zero Delay Available

Compatible with Voltage Mode or Current Mode Topologies

Practical Operation at Switching Frequencies to 300 kHz

10-MHz Error Amplifier

Pin Programmable Undervoltage Lockout

Low Startup Current — 150 μA

Soft Start Control

Outputs Active Low During UVLO

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Recommended For You

UCC28064ADR	UC3637N	UCC27517DBVR
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
SOP16	DIP-18	SOT23-5
UCC2946TPWRQ1	UCC28730QDRQ1	UCC21222QDRQ1
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
TSSOP8	SOP7	SOP16
UCD9090QRGZRQ1	UCC27531QDBVRQ1	UCC27511AQDBVRQ1
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
VQFN-48	SOT23-6	SOT23-6
UCC2803QDRQ1	UCC28951QPWRQ1	UCC21320QDWKRQ1
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
SOP8	TSSOP24	SOIC-14

UCC27322QDGNRQ1

UCC28950QPWRQ1

UCC2808AQDR-2Q1

Texas Instruments, Inc

Texas Instruments, Inc

Texas Instruments, Inc

HVSSOP-8

TSSOP24

SOP8