

## Description

GM384XA series is high performance with fixed-frequency current mode PWM controllers. They are specially designed for off-Line and DC-to-DC converter applications with minimum external components. These devices feature a trimmed oscillator for precise duty cycle control, a temperature compensated reference, high gain error amplifier, current sensing comparator, and high current totem pole output which is suitable for driving MOSFETs.

The under voltage lock-out (U.V.L.O.) is designed to operate with 0.17mA typ. start-up current, allowing an efficient bootstrap supply voltage design. The U.V.L.O. thresholds for the GM3842A/44A are 16V (on) and 10V (off) which are ideal for off-line applications. The corresponding typical threshold for the GM3843A/45A is 8.4V (on) and 7.6V (off). The GM3842A/43A can operate within 100% duty cycle and the GM3844A/45A can operate within 50% duty cycle.

## Available Options

Device	Start-UP Voltage	Hysteresis	Max. Duty Cycle
GM3842A	16V	6V	< 100%
GM3843A	8.4V	0.8V	< 100%
GM3844A	16V	6V	< 50%
GM3845A	8.4V	0.8V	< 50%

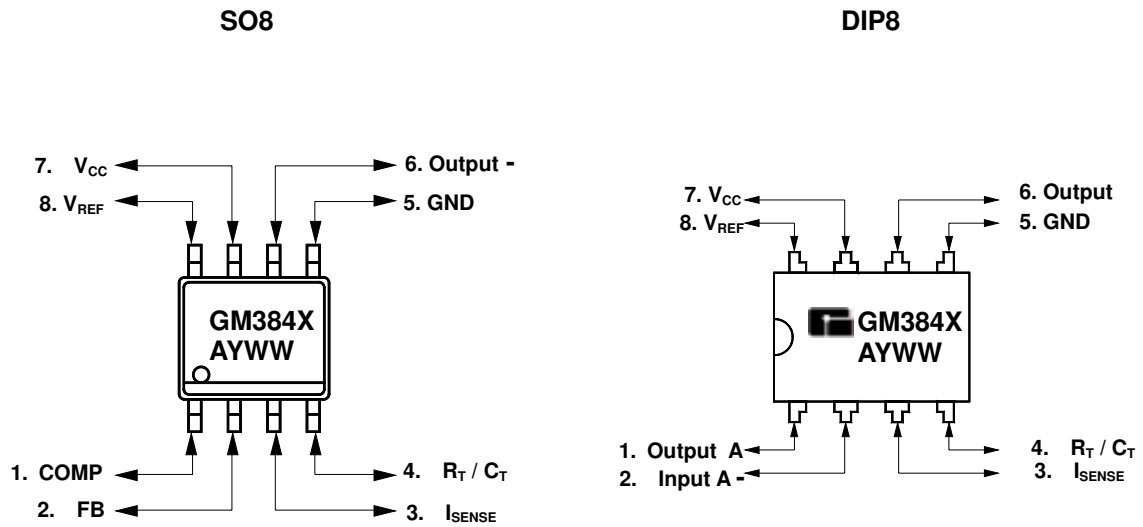
## Features

- ◆ Low Start-Up and Operating Current
- ◆ Automatic Feed Forward Compensation
- ◆ Current Mode Operating Frequency up to 500KHz
- ◆ Trimmed Oscillator Discharge Current for Precise Duty Cycle Control
- ◆ Latching PWM for Cycle-By-Cycle Current Limiting
- ◆ Under Voltage Lockout with Hysteresis
- ◆ High Current totem Pole Output Stage

## Application

Off-line flyback or forward converters  
DC-to DC buck boost converter  
Monitor Power Supply

## Marking Information and Pin Configurations (Top View)



A: Assembly / Test site code  
Y: Year  
WW: Week

## Ordering Information

Ordering Number	Package	Shipping
GM3842AD8T	DIP-8	60 Units / Tube
GM3842AS8T	SOP-8	100 Units / Tube
GM3842AS8R	SOP-8	2,500 Units / Tape & Reel
GM3843AD8T	DIP-8	60 Units / Tube
GM3843AS8T	SOP-8	100 Units / Tube
GM3843AS8R	SOP-8	2,500 Units / Tape & Reel
GM3844AD8T	DIP-8	60 Units / Tube
GM3844AS8T	SOP-8	100 Units / Tube
GM3844AS8R	SOP-8	2,500 Units / Tape & Reel
GM3845AD8T	DIP-8	60 Units / Tube
GM3845AS8T	SOP-8	100 Units / Tube
GM3845AS8R	SOP-8	2,500 Units / Tape & Reel