

**CURRENT MODE PWM CONTROLLER****AP384XC****Description**

The AP384XC are high performance fixed frequency current-mode PWM controller series. These integrated circuits are optimized for off-line and DC-DC converter applications with minimum external components. They feature under-voltage lockout (UVLO) circuit with low start-up current, trimmed oscillator for precise duty cycle control, current sense comparator providing maximum current limiting and a totem pole output stage for increasing output current. In addition, these ICs also feature accurate protection against over-temperature, over-current and maximal output power.

**Features**

- Ultra Low Start-up Current: 50 $\mu$ A
- Robust  $V_{REF}$  Line/Load Regulation  
Low Line Regulation : 4mV  
Low Load Regulation : 4mV
- High Stability of Reference Voltage over a Full Temperature Range: 0.2mV/  $^{\circ}$ C
- Operating Frequency up to 500KHz
- High PWM Frequency Stability over a Full Temperature Range: 2.5%
- High PWM Frequency Stability under a Full Supply Voltage Range: 0.2%
- Accurate Over-temperature Protection with Hysteresis
- UVLO with Hysteresis

**Applications**

- Off-line Converter
- DC-DC Converter
- Voltage Adapter
- CRT Monitor Power Supply
- Desktop Power Supply
- DVD/STB Power Supply

**Parametric Table**

Startup Current ( $\mu$ A)		50
UVLO Threshold on/off (V)	AP3842C/ 44C	16/10
	AP3843C/ 45C	8.4/7.6
Maximum Duty Cycle	AP3842C/ 43C	97%
	AP3844C/ 45C	48%
Frequency Stability with $V_{CC}$		0.2%
Frequency Stability with Temperature		2.5%
Reference Voltage Stability with Temperature (mV/ $^{\circ}$ C)		0.2
Shutdown Temperature ( $^{\circ}$ C)		155
Package		SOIC-8
		DIP-8

**Benefits**

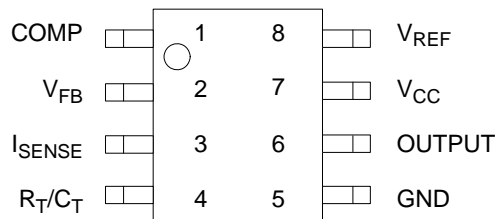
- Lower Standby Power Dissipation is possible
- Completely Compatible with Industry Standard Controller 384X

**Additional Available Materials**

- Samples
- Data Sheet
- Reliability Report
- ESD Report
- Application Notes
- Demo Board

**CURRENT MODE PWM CONTROLLER****AP384XC****Pin Configuration**

SOIC-8/DIP-8

**Ordering Information**

Package	Temperature Range	Part Number		Marking ID		Packing Type
		Tin Lead	Lead Free	Tin Lead	Lead Free	
SOIC-8	-40 to 85°C	AP3842/3/4/5CM	AP3842/3/4/5CM-E1	3842/3/4/5CM	3842/3/4/5CM-E1	Tube
		AP3842/3/4/5CMTR	AP3842/3/4/5CMTR-E1	3842/3/4/5CM	3842/3/4/5CM-E1	Tape & Reel
DIP-8	-40 to 85°C	AP3842/3/4/5CP	AP3842/3/4/5CP-E1	AP3842/3/4/5CP	AP3842/3/4/5CP-E1	Tube

Detailed information please refer to the relevant datasheet.

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