

**LOW POWER PWM CONTROLLER FOR OFF-LINE ADAPTER****AP3710****Description**

The AP3710 is a green-mode PWM controller, its main applications are low power supplies such as offline battery chargers, adapters, STB and other auxiliary supplies, where the needs for low no load power, low total cost and high reliability are all required.

The functional blocks of AP3710 include: under voltage lockout with low start-up current; precise voltage reference for internal comparators; PWM comparator with current limit control, feedback signal and bandgap input; short circuit comparator and open circuit protection for opto-coupler.

The AP3710 operates at a fixed 60kHz switching frequency, its output connects to the emitter of high voltage NPN transistor or the source of MOSFET. In normal mode, it works as a switch to turn on or turn off the external transistor. In failure modes like open loop, over voltage or overload due to short circuit, the chip enters into an auto restart mode controlled by the internal protection unit.

Features

- Current Mode Control with Skip Cycle Capability
- Low Start-up Current: 0.25 mA
- Low Operating Current: 0.45mA
- Output Current Capacity: 900 mA
- Fixed Switching Frequency: 60 kHz
- Frequency Dithering for Low EMI
- Under-Voltage Lockout with Hysteresis
- Built-in Slope Compensation
- Short Circuit Protection
- Open and Short Circuit Protection for Opto-Coupler
- Maximum Input Power is 0.2W under No Load
- Maximum Input Power is 1W under 0.5W Load
- Low Total Cost Solution

Parametric Table

Switching Frequency (kHz)	60
Startup Current (μ A)	250
Operating Current (μ A)	450
Package	SOIC-8 DIP-8

Applications

- Adapters
- Battery Chargers
- Set Top Boxes
- Auxiliary Supplies
- DVD

Benefits

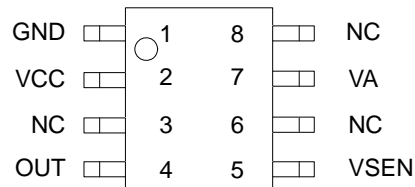
- Better Electrical performances
- Low total cost

Additional Available Materials

- Samples
- Data Sheet
- ESD Report
- Demo Board
- Application Note

**LOW POWER PWM CONTROLLER FOR OFF-LINE ADAPTER****AP3710****Pin Configuration**

SOIC-8/DIP-8

**Ordering Information Example**

Package	Switching Frequency	Temperature Range	Part Number		Marking ID		Packing Type
			Lead Free	Green	Lead Free	Green	
SOIC-8	60kHz	-40 to 85°C	AP3710M-E1	AP3710M-G1	3710M-E1	3710M-G1	Tube
			AP3710MTR-E1	AP3710MTR-G1	3710M-E1	3710M-G1	Tape & Reel
DIP-8	60kHz	-40 to 85°C	AP3710P-E1	AP3710P-G1	AP3710P-E1	AP3710P-G1	Tube

Detailed information please refer to the relevant datasheet.

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