

High Efficiency Off-Line CC/CV Switch

FEATURES

- Constant-Current (CC) and
 Constant-Voltage (CV) with Primary Side
 Control
- Proprietary technology enabling high efficiency and fast dynamic response
- Satisfies DoE Level 6 /CoC V5 Tier2 efficiency requirements
- No audible noise over entire operating range
- > Optimization for capacitive loading
- Built-in power NPN
- > Built-in Cable Compensation
- Built-in Line Compensation
- Primary-side feedback eliminates opto-coupler and TL431
- Cycle-by-Cycle Current Limiting
- > Over Temperature Protection
- VCC Over Voltage Protection
- > CV Open-loop Protection
- Excellent capacitive loading start-up performance

TYPICAL APPLICATION

- Adapter/Charger for Cell/Cordless Phones,
 PDAs, MP3 and Other Portable Apparatus
- Standby and Auxiliary Power SuppliesSet Top Boxes (STB)
- Adapter for ADSL / WiFi Wireless
- AC/DC LED Driver applications

DESCRIPTION

The FT8783Nx controller device is optimized for high-performance, low power switching mode power supply applications. The FT8783NX facilitates CC/CV charger design by eliminating an opto-coupler and TL431. Its highly integrated functions such as Under Voltage Lockout (UVLO), Leading Edge Blanking (LEB) and built-in cable compensation offer the users a high efficiency and low cost solution for AC/DC power applications.

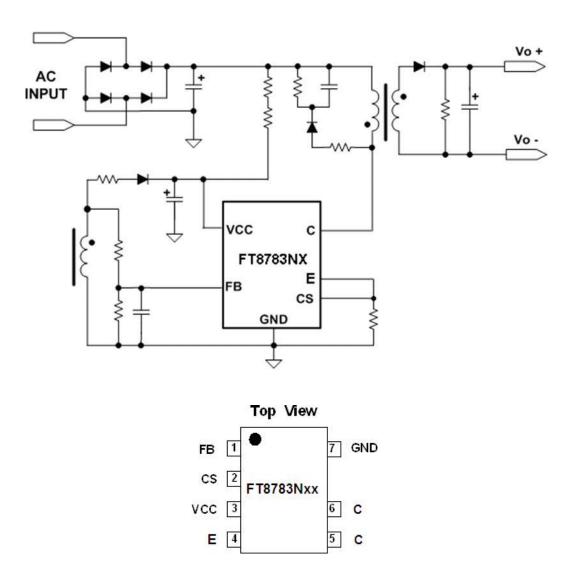
Power supplies built with FT8783NX can achieve both highest average efficiency, fast dynamic load response and super low standby power. FT8783NX satisfy DoE Level 6 /CoC V5 Tier2 requirements with production margin.

Furthermore, FT8783NX features fruitful protections like Open Circuit Protection and Over Temperature Protection to eliminate the external protection circuits and provide reliable operations.

FT8783Nx is available in SOP7 package.



TYPICAL APPLICATION CIRCUIT AND PIN ASSIGNMENT



TERMINAL DEFINITION

Pin	Name	Description
1	FB	Output voltage feedback pin
2	CS	Primary current sense
3	VCC	Power Supply
4	E	The Emitter of the power NPN
5/6	С	The Collector of the power NPN
7	GND	Ground.

Table 1