

GENERAL DESCRIPTION

OB2298 is a highly integrated current mode PWM controller for medium to high power offline flyback converter applications.

OB2298 integrates PFC IC power supply control function and shuts down PFC stage at no load or light load conditions.

To meet the increasing stringent standby power requirements in light or zero load, OB2298 operates in On-Bright's proprietary "extended burst mode" without audio noise. Constant power limit is achieved by On-Bright's proprietary OCP compensation technique where OCP due to CCM and DCM mode difference is compensated in universal AC input applications.

OB2298 offers comprehensive protection coverage including Cycle-by-Cycle current limiting, internal Power-On Soft Start, VDD Under Voltage Lockout (UVLO), VDD Over Voltage Protection (OVP), VDD Clamp, Gate Clamp, Over Load Protection (OLP), Over Temperature Protection (OTP), Programmable Brownout Protection, All Pins Floating Protection, and RT Latch triggering feature.

In applications where VDD is supplied by auxiliary power supply, the built-in 1 second restart timer can prevent permanent OLP latch. In other applications, this restart timer will not be triggered.

To achieve good EMI performance, On-Bright's proprietary built-in frequency shuffling is provided, also with soft switching control at the totem pole gate drive output.

OB2298 is offered in SOP-8 and DIP-8 packages.

FEATURES

- Direct Control of PFC
- Programmable Brownout Protection
- Internal 4ms Power On Soft Start Time
- Internal Restart Timer
- Pin Floating Protection
- Proprietary Extended Burst Mode Control For Improved Efficiency and Minimum Standby Power Design
- Built-in Frequency Shuffling for Better EMI
- Built-in Leading Edge Blanking
- Proprietary OCP Compensation for Universal AC Input Range
- Low Startup Current(5uA) and Low Operating Current (2.3mA)
- Built-in Synchronized Slope Compensation
- 1.0A Peak Current Driving Capability
- Audio Noise Free Operation
- Convenient High and Low Triggering Level Latch Off Function

APPLICATIONS

Offline AC/DC flyback converter for

- Laptop Power Adaptor
- LCD Monitor Power
- LCD TV Power and Home Appliance Power
- Printer Power
- Lighting Power

TYPICAL APPLICATION

