

## DESCRIPTION

MT2300 is a highly integrated flyback PWM controller with a maximum 85kHz operating frequency.

It is built-in with several features to enhance the performance of the power supply. The controller operates in CCM at heavy load and changes to valley switching mode at light load. The operation further goes into burst mode for extremely light load.

There is no need to add startup resistor and X-capacitor discharge resistor with HV startup and built-in X-cap discharge mechanism, the controller provides extremely low input power consumption.

## APPLICATIONS

- USB PD and programmable power supply
- Switching AC/DC adaptor and battery charger
- Open frame switching power supply

## FEATURES

- Integrates 700V high voltage startup circuit
- Low input power consumption: <30mW
- BNI/BNO and X-cap discharge on HV pin
- Valley switching/CCM multi-mode operation
- Auto-tune CS limit for wide range output
- Two step CS limit for peak load application
- Line voltage compensation for constant OPP
- Frequency jittering technology to reduce EMI
- Built-in slope compensation
- 6ms soft start time
- Supports various protection features:
  - Programmable Ext. OTP
  - Programmable DEM OVP/UVP
  - Short-circuit protection (SCP)
  - Secondary SR SCP (SRSP)
  - FB OLP
  - VCC OVP
  - Int. OTP
- Meets LPS standard
- Adaptive VCC self-recovery protection mode to reduce input power consumption
- Available in SOP8 package

## TYPICAL APPLICATION CIRCUIT

