

**Multi-Mode PWM Controller with Integrated Protections**

**Features**
- Low Start-Up Current (<2uA)
- Multi-Mode Operation
  - CCM @ Heavy Load and Low Line
  - QR-Like Operation @ Medium Load
  - Green mode with Valley Skip at Light Load
  - Burst Mode at No Load
- Accurate Over Current Protection
- Adjustment OVP on QRD Pin
- Output Short Protection
- Soft Driver
- 8ms Soft-start
- OVP (Over Voltage Protection) on VCC Pin
- On Chip OTP Protection
- SOT-26 Package with Few External Components Needed

**Description**

The GR1230R is a high performance multi-mode (QR/CCM) PWM controller for flyback converter. It minimizes the components counts and is available in a tiny SOT-26 package. Those make it an ideal design for low cost application. It provides functions of low startup current, green-mode power-saving operation, VCC over-voltage protection, and QRD pin abnormal conditions sensing to prevent the circuit being damaged from the abnormal conditions.

**Applications**
- Switching AC/DC power adapter
- SMPS Power Supply

**Typical Application Information**

![Typical Application Information Diagram]