

YX5311 –100V  $V_{IN}$  Flyback Controller**1 Features**

- Wide input voltage range of 2.7V to 100V
- Gate driver with 5V gate drive voltage for N-channel MOSFET or GaN
- Set  $V_{OUT}$  with single external resistor
- No opto-coupler or third winding of transformer required for  $V_{OUT}$  regulation
- High efficiency at light load mode (DCM)
- Low input quiescent current
- Internal compensation and soft-start function
- Shut down and Enable control
- Build-In UVLO and short circuit protection
- Over current and over temperature protection
- 6-Lead TSOT-23 Package

**2 Applications**

- Isolated Power supply for industrial, automotive, telecom equipment
- HVAC systems
- General Flyback, Buck-Boost, Buck converters
- Surveillance camera application

**3 Description**

The YX5311 is an isolated Flyback controller with high efficiency over a wide input voltage range of 2.7V to 100V. It directly measures output voltage from the primary side Flyback waveform and no needs opto-coupler or third winding for regulation. Only a single resistor required to set the output voltage. The YX5311 provides 5V gate drive voltage to drive external N-channel MOSFET or GaN. The internal compensation and soft-start functions decreases the number of external components. To maintain the high efficiency and minimize the output voltage ripple, the YX5311 operates in Burst Mode at light load.

The YX5311 features under voltage lockout (UVLO), short circuit protection (SCP) and over temperature protection (OTP) to help the device operate safely and reliably.

The YX5311 is available in 6-lead TSOT-23 package.

**4 Device Information**

PART NUMBER	PACKAGE	BODY SIZE (NOM)
YX5311EADAE	6L TSOT-23	2.9mm × 2.8mm

**5 Simplified Application circuit for Isolated Flyback Converter**