

YX5321 2.7V–100V V_{IN} Flyback Converter with 200V/2A Integrated Switch

1 Features

- Wide input voltage range of 2.7V to 100V
- Integrated 500m, 200V/2A power MOSFET
- Set V_{OUT} with single external resistor
- High output regulation accuracy (+/-1%)
- No opto-coupler or no 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
- SOP-8 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 YX5321 is an isolated Flyback converter with high efficiency over a wide input voltage range of 3V 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. Internal compensation and soft-start functions decreases the number of external components. To maintain the high efficiency and minimize the output voltage ripple, the YX5321 operates in Burst Mode at light load. The integrated 200V/2A power switch provides up to 6W of output power.

The YX5321 features under voltage lockout (UVLO), short circuit protection (SCP) and over temperature protection (OTP) to help the device operate safely and reliably.

The YX5321 is available in SOP-8 package.

4 Device Information

PART NUMBER	PACKAGE	BODY SIZE (NOM)
YX5321GALAG	SOP-8	4.9mm×3.9mm

5 Simplified Application circuit for Isolated Flyback Converter

