

YX5320 2.7–75V V_{IN} Flyback Converter with 100V/8A Integrated Switch

1 Features

- Wide input voltage range of 2.7V to 75V
- Integrated 100V/8A power MOSFET
- 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
- DFN-8(3mmx3mm) Package

2 Applications

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

3 Description

The YX5320 is an isolated Flyback converter with high efficiency over a wide input voltage range of 2.7V to 75V. It directly measures output voltage from the primary side 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 YX5320 operates in deep DCM Mode at light load. The integrated 100V/8A power switch provides up to 15W of output power.

The YX5320 features under voltage lockout (UVLO), short circuit protection (SCP) and over temperature protection (OTP) to help the device operate safely and reliably.

The YX5320 is available in DFN-8 package.

4 Device Information

PART NUMBER	PACKAGE	BODY SIZE (NOM)
YX5320AAEAG	DFN-8	3mm × 3mm

5 Simplified Application circuit for Isolated Flyback Converter

