

## YX5321 36-75V Input, 12V Output Isolated Power EVB Manual

### 1 Description and Features

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 SOP8 package.

#### Features

- Wide input voltage range of 3V to 100V
- Integrated 200V/2A power MOSFET
- Set VOUT with single external resistor
- No opto-coupler or third winding of transformer required for VOUT 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
- SOP8 Package

### 2 Board Specifications

Table 1 Board specification

| Parameter                 | Value                   | Unite |
|---------------------------|-------------------------|-------|
| Input Voltage             | 36 to 75                | V     |
| Output Voltage            | 12                      | V     |
| Maximum Output Current    | 0.5                     | A     |
| Rated switching frequency | 229<br>@36Vin,0.5A Load | kHz   |
| Board Size                | 7.0x6.5                 | mm    |

### 3 Test Setup

