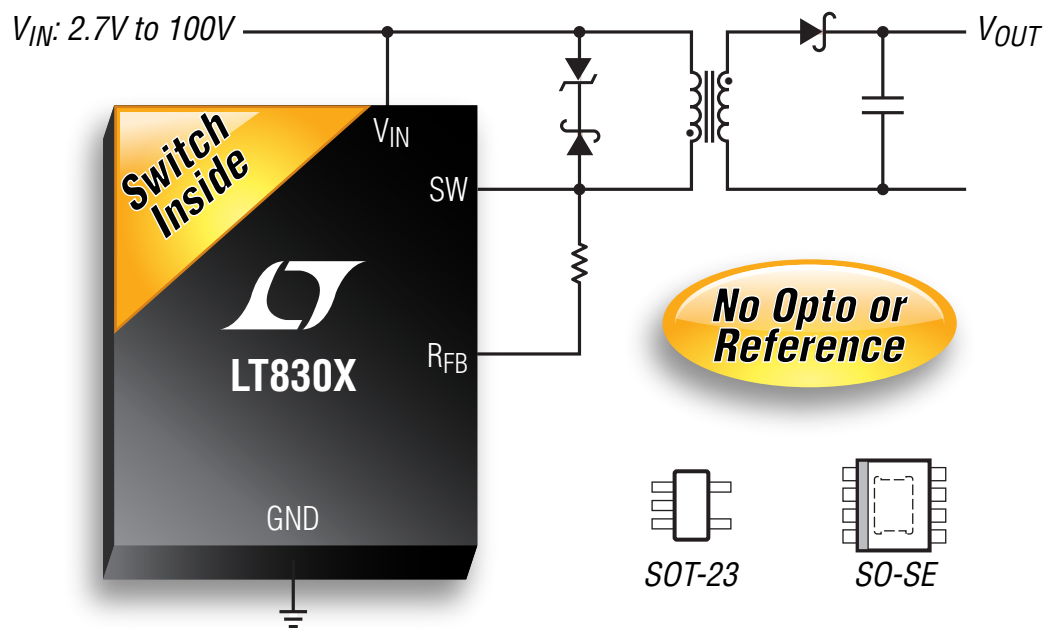


# No-Opto Isolated Flyback Converters



The No-Opto isolated flyback devices from Linear Technology need no opto-coupler or LT1431 for regulation. The devices sense the reflected isolated output voltage from the primary-side waveform, resulting in better than  $\pm 1\%$  load and line regulation. This simplifies the design, enables a smaller solution size and only requires one component crossing the isolation barrier. Several off-the-shelf transformers are shown in the data sheets, making it easy to complete the design.

## No-Opto Monolithic Devices (Internal Switch)

Part Number	$V_{IN}$ Range (V)	Max $P_{OUT}$ (W)	Power Switch Rating	Package
LT8300	6-100	2	0.23A/150V	SOT-23
LT8303	5.5-100	5	0.5A/150V	SOT-23
LT8301	2.7-42	6	1.2A/65V	SOT-23
LT8302	2.8-42	18	3.6A/65V	SO-8E
LT8304/LT8304-1	3-100	24	2A/150V	SO-8E
LT8315	18-560	15	0.3A/630V	TSSOP-20 (16)

## No-Opto Controller Devices (External Switch)

Part Number	$V_{IN}$ Range	Max $P_{OUT}$ (W)	Description	Package
LT3748	5VDC-100VDC	80-100	No-Opto Flyback Controller	MSOP-16 (12)
LT8309	4.5VDC-40VDC	80-100	Flyback Synchronous Rectifier Driver	SOT-23
LT3798	20-400VDC/90-264VAC	80-100	No-Opto Flyback Controller with PFC	MSOP-16E

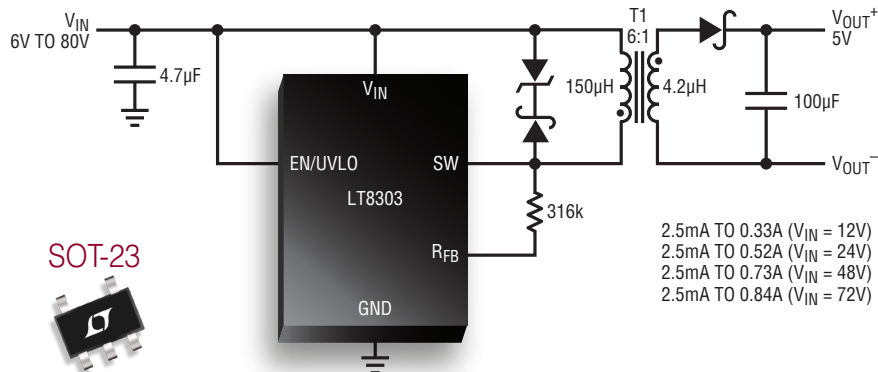
## Features

- Input Voltage Ranging from 2.7V to 400V
- No Opto-Coupler Required
- Primary-Side  $V_{OUT}$  Sensing
- Only One Part Crossing the Isolation Barrier
- Internal Loop Compensation for Monolithic Required Devices
- Compact Packages
- Off-the-Shelf Transformers from Wurth, Sumida and Pulse Engineering

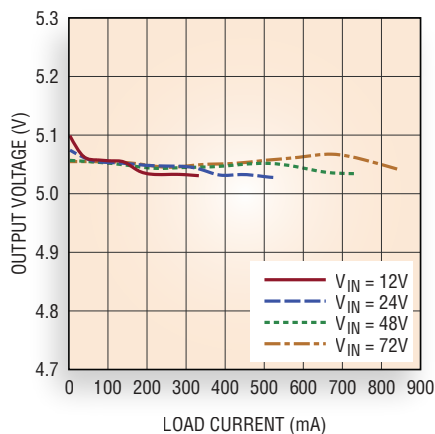
## Applications

- Telecom/Datacom
- Industrial Controls
- Automotive
- Factory Automation
- Heavy Equipment
- Medical
- Robotics and Aviation
- Housekeeping Supplies

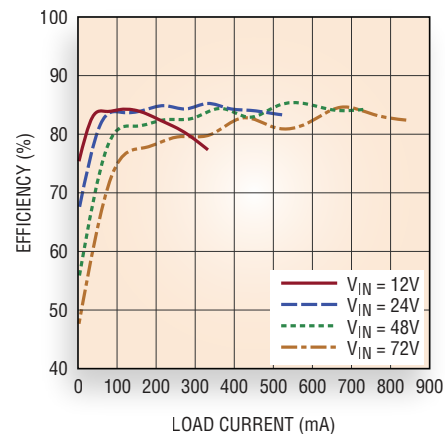
## LT8303 Telecom/Datacom Isolated Schematic



## Output Load and Line Regulation



## Efficiency vs Load Current



## LT8303 Demo Board Photo

