



PI Expert™ Design Tool

Rapidly converts specification into a working power supply design and provides:

- Best PI product to meet design requirements
- Complete schematic and BOM
- Board layout recommendations
- Magnetic design with complete build instructions
- Performance optimization

Simplify Design of Off-Line Power Supplies

The screenshot displays the PI Expert Online web application. The main area shows a detailed schematic of a flyback power supply. The circuit includes an input filter with capacitors C1, C2, and C3, followed by a bridge rectifier (D1, D3) and a power MOSFET (M1) switching a transformer (T1). The secondary side features a full-bridge rectifier (D2, D4), a filter capacitor (C4), and a feedback network (R11, R12, R10, C10, C11). The controller (U1) is an InnoSwitch3-EP. The output is regulated to 12.0 V, 2.00 A.

Specification

- Topology: Flyback
- Family: InnoSwitch3-EP
- Package: C (INSOP-340)
- Breakdown Voltage: 750 (PowGaN)
- Feedback Type: Secondary Divider
- Line Frequency: 50
- Input Voltage Type: Universal (85 - 265 V)
- Use SR on Main Output: YES
- Total Peak Power: 24.00
- Current Limit Mode: Standard

Documentation

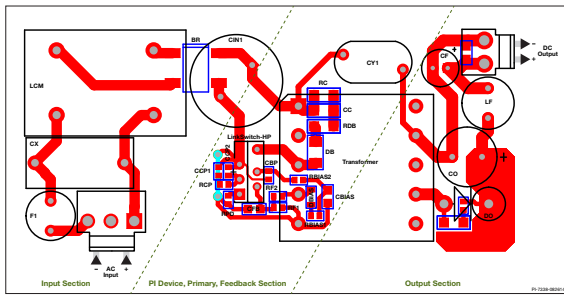
- Product Page
- InnoSwitch3-EP
- Data Sheets
- InnoSwitch3-EP Data Sheet
- Design Examples
- RDR-611 - 10 W Dual Output Power Supply
- DER-747 - 65 W Power Supply Using InnoSwitch3-EP
- DER-745 - 10 W Dual Output Power Supply Using InnoSwitch3-EP 900 V
- DER-752 - 15 W Dual Output Power Supply with +83% Standby Efficiency

PI Products Supported

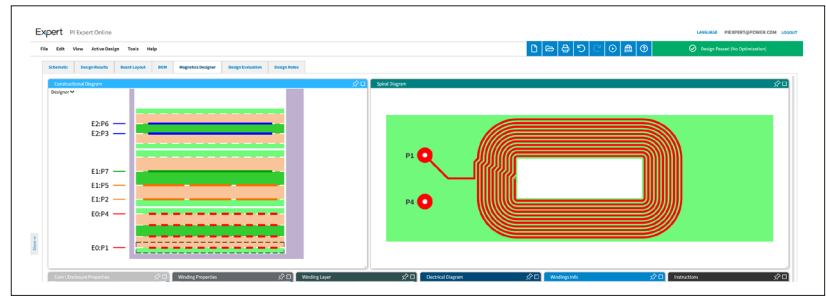
PI Product	PI Expert	PI xls Designer
BridgeSwitch™		X
DPA-Switch™	X	X
Hiper™ Families		X
InnoSwitch™		X
InnoSwitch3	X	X
InnoSwitch4		X
LinkSwitch™-II, 3, 4, LP, TN, TN2, XT2		X

PI Product	PI Expert	PI xls Designer
LinkSwitch-CV, HP, PH, PL, XT	X	X
LinkSwitch-TNZ		X
LinkZero™-AX, LP		X
LYTSwitch™-6	X	X
LYTSwitch-0, 1, 2, 3, 4, 5, 7		X
TinySwitch™-III, 4	X	X
TOPSwitch™-HX, JX	X	X

Layout Recommendations



Magnetics Designer - Planar Transformer



Get Started

- Online** PI Expert Online (www.power.com/pi-expert-online)
- Download** PI Expert Suite Software (for desktop) (www.power.com/pi-expert-download)

Design Support

- Video** Introduction to PI Expert (www.power.com/pi-expert-video)
- Video** PI Expert Now Supports Planar Transformer Designs (www.power.com/video/pi-expert-planar)
- Webinar** Introduction to PI Expert Online (www.power.com/webinar/pi-expert-pt1)
- Webinar** Magnetics Design in PI Expert Online (www.power.com/webinar/pi-expert-pt2)
- Webinar** Advanced Power Supply Design Using PI Expert Online (www.power.com/webinar/pi-expert-pt3)