EV6910A-S-00A

High Efficiency Synchronous Rectification EV Board

The Future of Analog IC Technology

DESCRIPTION

The EV6910A-S-00A is an evaluation board for the MP6910A. It is configured to provide synchronous rectification solution for Flyback converters.

ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Value	Units
Supply Voltage	V_{DD}	8–24	V

FEATURES

- Integrated 15mΩ 100V Power Switch
- Compatible with Energy Star, 1W Standby Requirements
- V_{DD} Range From 8V to 24V
- 65mV V_{DS} Regulation Function (1)
- Max 250kHz Switching Frequency
- Light Load Mode Function (1) with <300uA Quiescent Current
- Supports High-side and Low-side Rectification
- Power Savings of Up to 1.5W in a Typical Notebook Adapter

APPLICATIONS

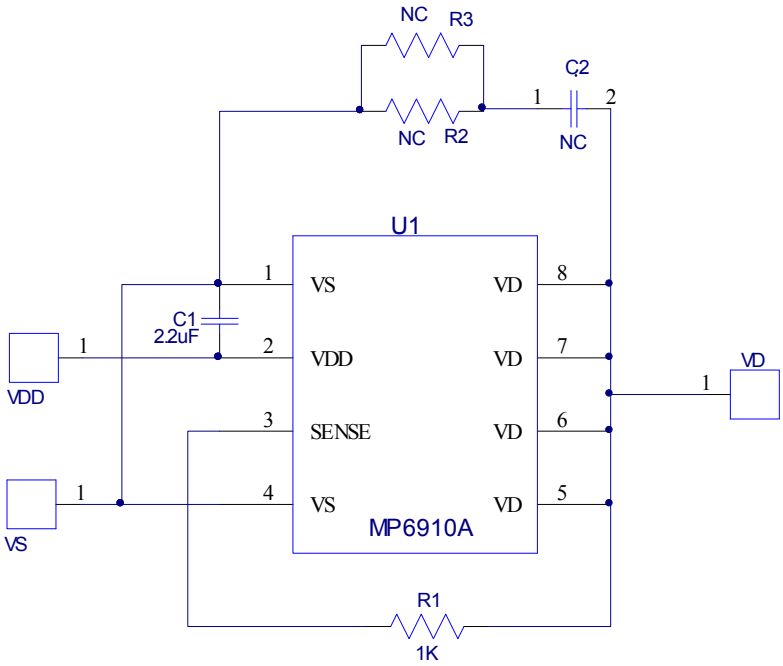
- Industrial Power Systems
- Distributed Power Systems
- Battery Powered Systems
- Flyback Converters

EV6910DZ-00A EVALUATION BOARD

(L x W x H) 0.9" x 0.9" x 0.6"
2.3cm x 2.3cm x 1.4cm

Board Number	MPS IC Number
EV6910A-S-00A	MP6910A

EVALUATION BOARD SCHEMATIC



EV6910DZ-00A BILL OF MATERIALS

RefDes	Value	Description	Package	Manufacturer	Manufacturer_PN
C1	2.2uF	Ceramic Capacitor;50V;X7R	0805	TDK	C2012X7R1H225K
C2	NC	Snubber Capacitor	0805		
R1	1kΩ	Film Resistor;1%	0603	Yageo	RC0603FR-071KL
R2,R3	NC	Snubber Resistor	1206		
U1	MP6910A	Smart Synchronous Rectifier	SOIC8	MPS	MP6910AGS-Z

PRINTED CIRCUIT BOARD LAYOUT

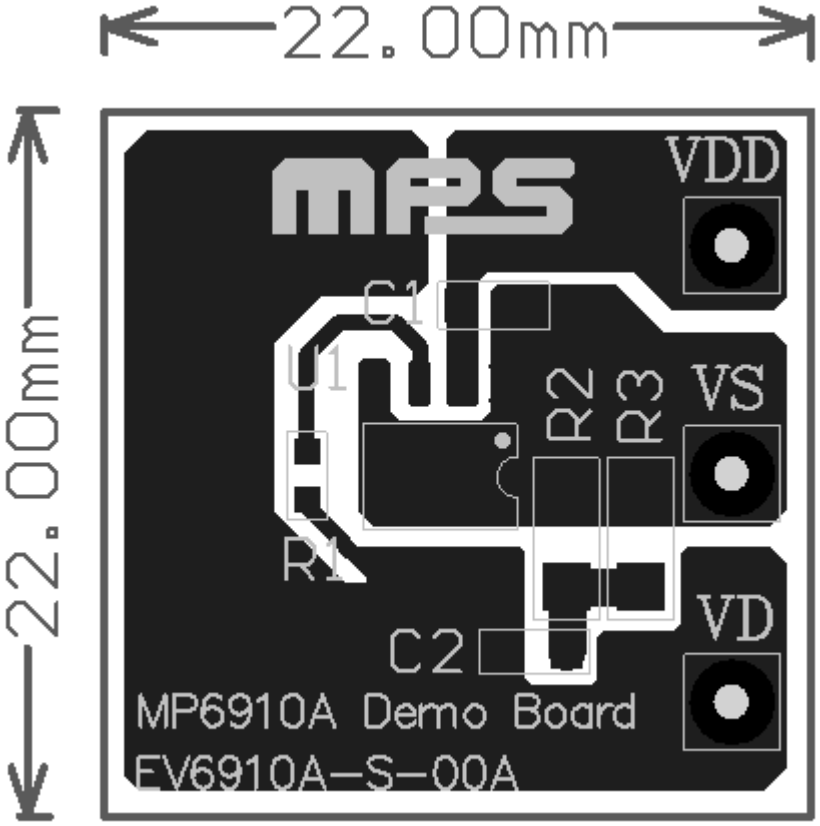


Figure 1—Top Layer

QUICK START GUIDE

1. Connect the positive and negative terminals of the output or the auxiliary winding to the V_{DD} and V_S pins, respectively.
2. Parallel the V_S pin and V_D pin as the Source and Drain of SR Mosfet in the flyback circuit.
3. Preset the input voltage of flyback converter to the normal input range, and then turn off the power supply.
4. Turn the power supply on. The IC will automatically starts up and works as an ideal diode.