EV6910DZ-00A

High Efficiency Synchronous Rectification EV Board

The Future of Analog IC Technology

DESCRIPTION

The EV6910DZ-00A is an evaluation board for the MP6910DZ. 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

- Supports DCM and Quasi-Resonant Flyback converters
- Integrated 10mΩ 100V Power Switch
- Compatible with Energy Star, 1W Standby Requirements
- V_{DD} Range From 8V to 24V
- Max 300kHz Switching Frequency
- Supports High-side and Low-side Rectification
- Power Savings of Up to 1.5W in a Typical Notebook Adapter

APPLICATIONS

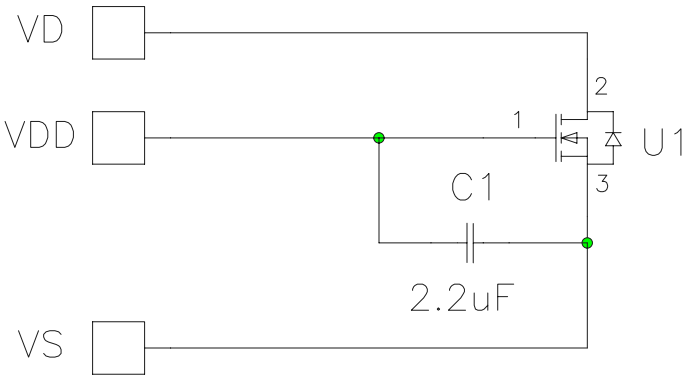
- Industrial Power Systems
- Distributed Power Systems
- Battery Powered Systems

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
EV6910DZ-00A	MP6910DZ

EVALUATION BOARD SCHEMATIC



EV6910DZ-00A BILL OF MATERIALS

Qty	RefDes	Value	Description	Package	Manufacturer	Manufacturer P/N
1	C1	2.2μF	Ceramic Cap., 25V, X7R	0805	muRata	GRM21BR71E225KA73L
1	U1	MP6910DZ	Smart Synchronous Rectifier	TO-220	MPS	MP6910DZ-R2

PRINTED CIRCUIT BOARD LAYOUT

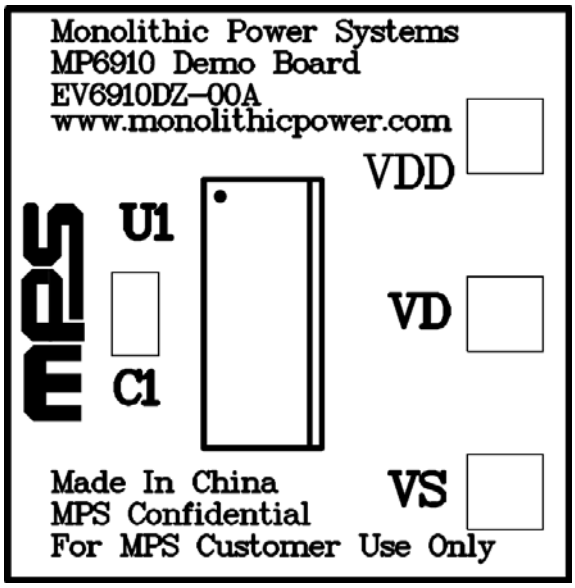


Figure 1—Top Silk Layer

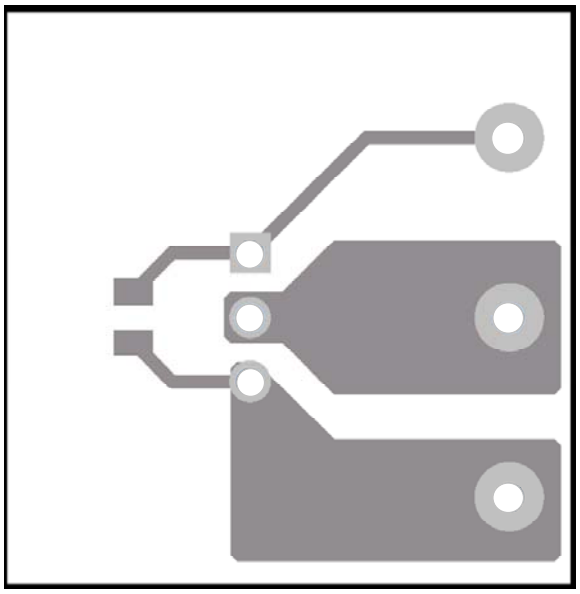


Figure 2—Top Layer

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.