

DESCRIPTION

The EV6903DS-00A is an evaluation board for the MP6903DS. It is configured to provide synchronous rectification solution for LLC topology.

MP6903DS features a synchronous gate output which enables high efficiency rectification by relating the schottky rectifier with a low Ron MOSFET.

ELECTRICAL SPECIFICATIONS

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

FEATURES

- Works with both Standard and Logic Level FETS
- Compatible with Energy Star, 1W Standby Requirements
- V_{DD} Range From 8V to 24V
- Fast Turn-off Total Delay of 20ns
- Max 400kHz Switching Frequency
- <300µA Quiescent Current at Light Load Mode
- Supports CCM, CrCM and DCM Operation Mode
- Supports High-side and Low-side Rectification

APPLICATIONS

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

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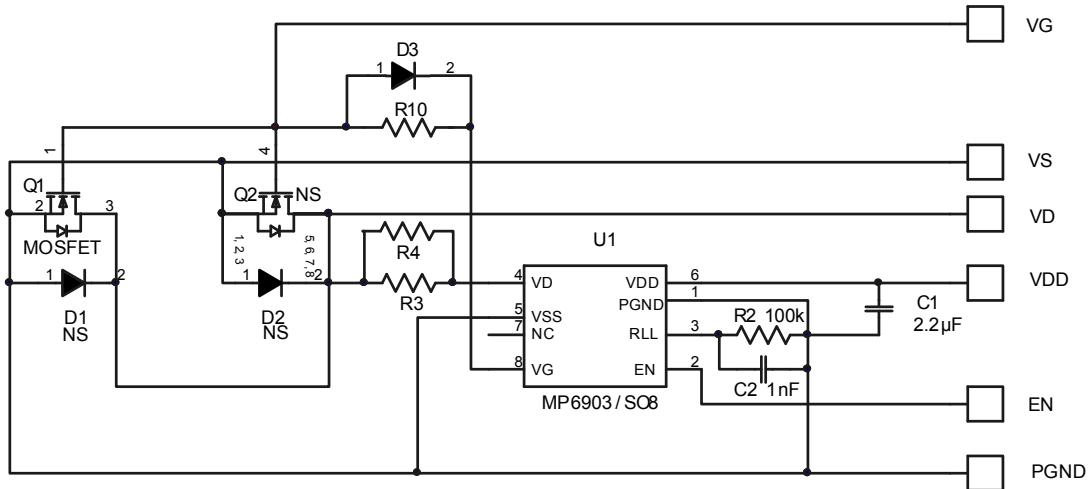
EV6903DS-00A EVALUATION BOARD



(L x W x H) 1.14" x 1.14" x 0.6"
2.9cm x 2.9cm x 1.4cm

Board Number	MPS IC Number
EV6903DS-00A	MP6903DS

EVALUATION BOARD SCHEMATIC



EV6903DS-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	C2	1nF	Ceramic Cap., 50V, X7R	0603	TDK	C1608X7R1H102K
1	R1	0	Film Res., 5%	0603	Yageo	RC0603JR-070RL
1	R2	100k	Film Res., 1%	0603	Yageo	RC0603FR-07100KL
1	R3	1k	Film Res., 1%	0603	Royalohm	0603F1001T5E
0	R4	NS				
1	Q1	MOSFET	N-CH 100V 8.8mΩ N-CH 100V 8mΩ	TO220-AB TO220	Vishay APEC	SUP90N10-8M8P AP85T10GP
0	Q2	NS		PowerPAK-SO8		
0	D1	NS		SMC		
0	D2	NS		TO220		
1	D3	DIODES	75V/0.15A	SOD323	Diodes	IN4148WS-7-F
1	U1	MP6903DS	MP6903DS	SO-8	MPS	MP6903DS

PRINTED CIRCUIT BOARD LAYOUT

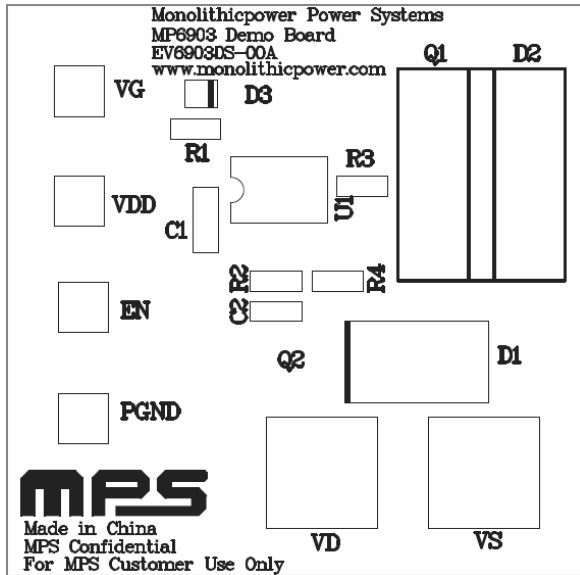


Figure 1—Top Silk Layer

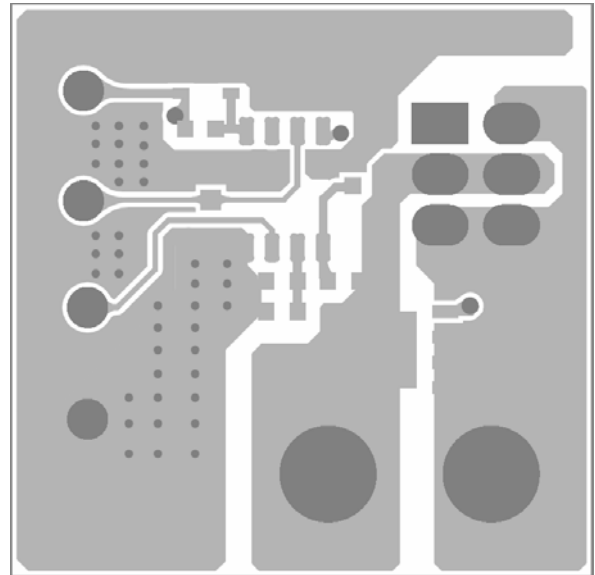


Figure 2—Top Layer

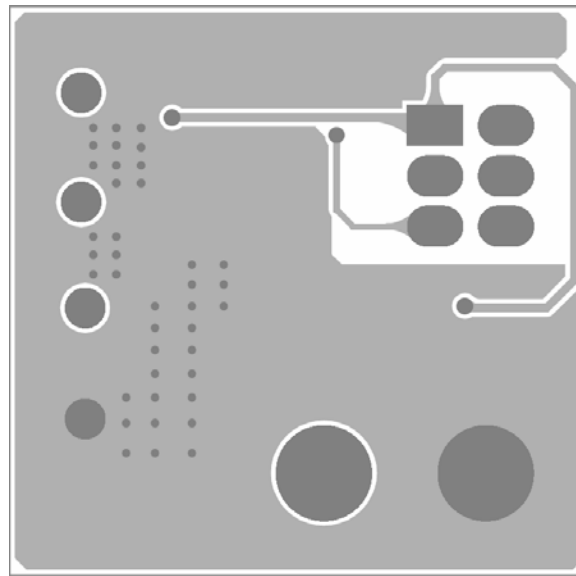


Figure 3—Bottom Layer