

### DESCRIPTION

The EV6205DD-00B is an evaluation board for MP6205DD, single-channel, current-limited, power-distribution switch.

The EVB operates over a 2.7V to 5.5V range and provides a continuous output current of up to 0.5A. It is available with guaranteed current limits, making it ideal for load switching applications. When the output load exceeds the current-limit threshold or a short is present, the device limits the output current to a safe level by switching into a constant-current mode.

This device, available in a QFN8 with exposed pad, provides a very compact system solution with minimal reliance on external components.

### ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Value	Units
Input Voltage	V <sub>IN</sub>	2.7– 5.5	V
Output Voltage	V <sub>OUT</sub>	2.7-5.5	V
Output Current	I <sub>OUT</sub>	0.5	A

### FEATURES

- Single Channel
- Accurate Current Limit
- 2.7V to 5.5V Supply Range
- Under-Voltage Lockout
- EN Active High
- Flag indicate when over-current, output short encountered.

### APPLICATIONS

- Smart phone and PDA
- Portable GPS Device
- Notebook PC
- Set-top-box
- Telecom and Network Systems
- PC Card Hot Swap
- USB Power Distribution

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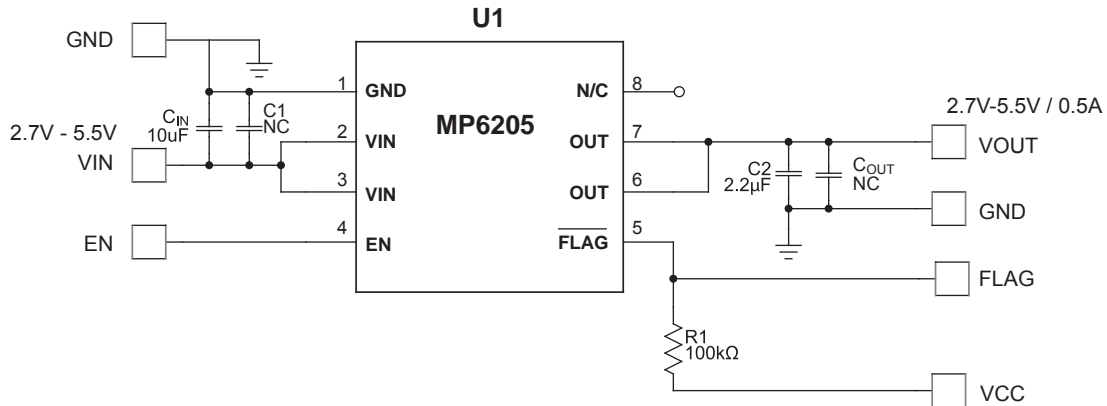
### EVALUATION BOARD



(L x W x H) 2.0" x 1.2" x 0.5"  
(5.0cm x 3cm x 1.2cm)

Board Number	MPS IC Number
EV6205DD-00B	MP6205DD

## EVALUATION BOARD SCHEMATIC



## EVALUATION BOARD SCHEMATIC BILL OF MATERIALS

Qty	Ref	Value	Description	Package	Manufacturer	Manufacturer P/N
1	CIN	10uF	Ceramic Cap, 16V, X7R	1206	Murata	GRM31CR71C106KAC7L
1	C2	2.2uF	Ceramic Cap., 16V, X5R	0805	TDK	C2012X5R1A225K
2	C1, COUT	NC				
1	R1	100kΩ	Film Res., 5%	0805	Any	
1	U1			QFN8	MPS	MP6205DD

## PRINTED CIRCUIT BOARD LAYOUT

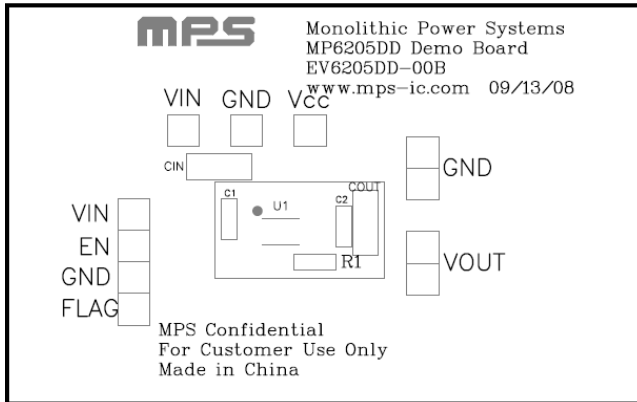


Figure 1—Top Silk Layer

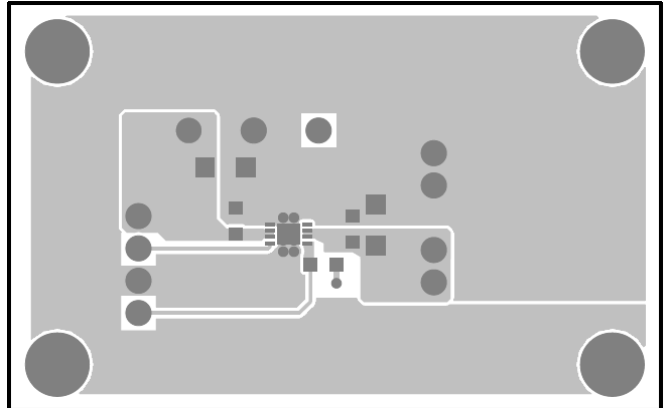


Figure 2—Top Layer

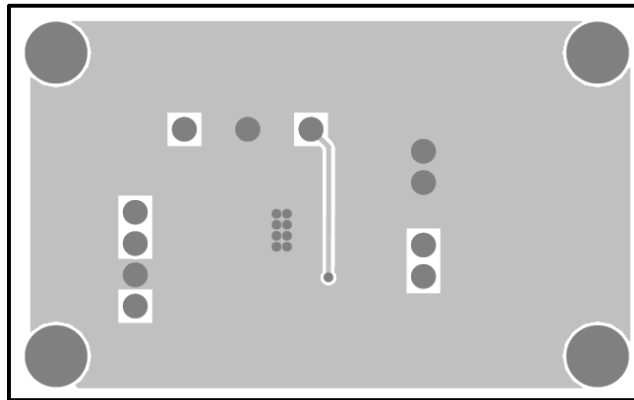


Figure 3—Bottom Layer

## QUICK START GUIDE

1. Connect the positive and negative terminals of the load to the VOUT and GND pins, respectively.
2. Preset the power supply output to between 2.7V and 5.5V, then turn off the power supply.
3. Connect the positive and negative terminals of the power supply output to the VIN and GND pins, respectively.
4. Turn the power supply on. The board will automatically startup.
5. To use the Enable function, apply an input to the EN pin. For active high, Drive EN higher than 2V to turn on the regulator or less than 0.4V to turn it off and vice versa for active low.
6. To use flag indicator, apply a 5V voltage to V<sub>CC</sub> pin.

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