DEM-SOT223LDO

This User's Guide describes the characteristics, operation, and use of the DEM-SOT223LDO demonstration module (DEM).

1 Background

The Texas Instruments DEM-SOT223LDO demonstration module (DEM) helps designers evaluate the operation and performance of Texas Instruments LDOs. This module is compatible with most positive output LDOs offered in the SOT223 (DCQ) package. This User's Guide includes setup instructions, a schematic diagram, and a PCB layout drawing for the DEM.

2 Setup

This DEM is specifically designed to be assembled with surface mount devices with footprints ranging from 603 to 1210. Additional holes have also been provided to accommodate leaded components. Refer to the product datasheet for specific guidelines when selecting components. The specific IC to be tested may be obtained through TI's sample program. All components other than the PWB are user supplied.

Figure 1 through Figure 3 show the board layout for the DEM-SOT223LDO printed circuit board.

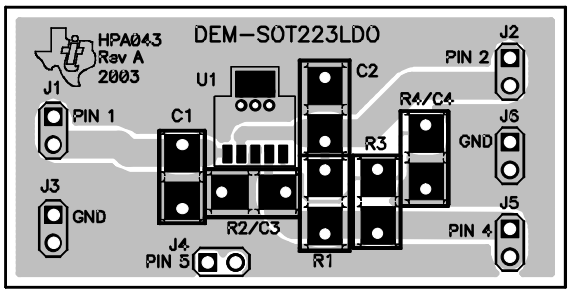


Figure 1. Assembly Layer

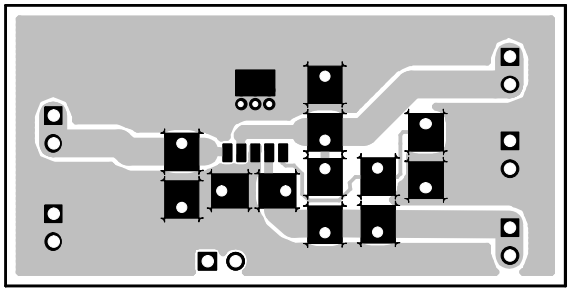


Figure 2. Top Layer Routing

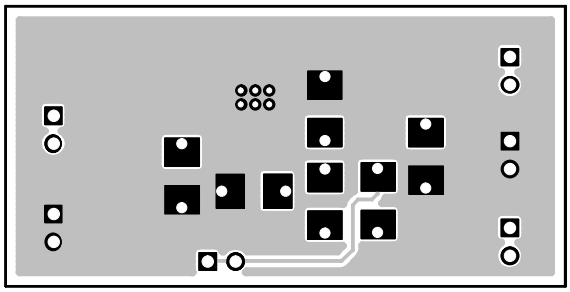


Figure 3. Bottom Layer Routing

3 Schematic

The schematic in Figure 4 illustrates the connections required to evaluate the two primary LDO pinouts in the SOT223 package. Depending on the LDO being evaluated, some components may be omitted.

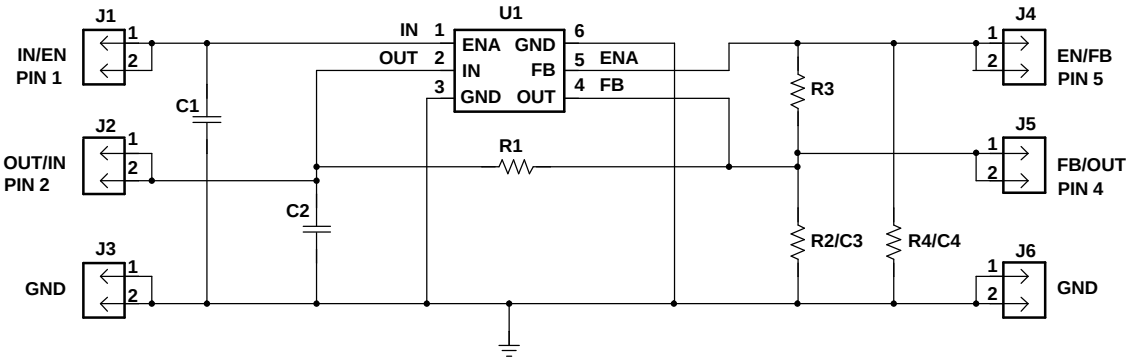


Figure 4. DEM-SOT223LDO Schematic

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