



GreenFET3 SLG59M1638V Layout Guide

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Description

The SLG59M1638V is a 45 m Ω , ~ 2 A dual-channel load switch that is able to switch 1.5 to 5.5 V power rails. The product is packaged in an ultra-small 1 x 1.6 mm package.



Figure 1: SLG59M1638V Block Diagram

This layout guide provides some important information about the PCB layout of SLG59M1638V applications.

SILEGO STDFN 1 x 1.6 - 8L PKG

Unit: um



Figure 2. SLG59M1638V Package Dimensions and

Recommended Land Pattern

Please solder your SLG59M1638V here



Figure 3. SLG59M1638V Evaluation Test Board Note: Evaluation board has D Sense and S Sense pads. Please use them only for RDS(ON) evaluation.

- 2. Power and Ground Planes
- 2.1. The trace length from the control IC to the ON pin should be as short as possible and must avoid crossing this trace with power rails.
- 2.2. The D/VIN and S/VOUT pins carry significant current. Please note how the D/VIN and S/VOUT pads are placed directly on the power planes in Figure 3, which minimizes the RDS(ON) associated with long, narrow traces. The D/VIN and S/VOUT pins dissipate most of the heat generated during high-load current condition. The layout shown in Figure 3 is illustrating a proper solution for heat to transfer as efficiently as possible out of the device. 2.3. The GND pin (PIN7) should be connected to GND.

2.4. 2 oz. copper is recommended for higher currents.