**Document No. : 18-072118-01-REV. A**

**Title : EVAL-LTC7067-AZ Eval Board Test Procedure**

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| REVISION HISTORY | | | | |
| **Revision** | **ECR #** | **Description of Change** | **Date** | **Author** |
| A | ECR-112470 | Initial Release | 262/2023 | Yinan Cai |
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**Test Procedure for EVAL-LTC7067-AZ**

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**Introduction**

The EVAL-LTC7067-AZ features the LTC7067 in a default set up with a single load capacitor. It’s also flexible and can be tested in configuration as a non-synchronous step down or as a nonsynchronous step-up converter. Specifications for the input voltage range, PWM input voltage are shown in Table 1:

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| --- | --- | --- |
| PARAMETER | CONDITIONS | VALUE |
| Input Voltage Range |  | 4.5V to 14V |
| PWM input range | VIN = 4.5V to 14V | 0V to 6V |

1. Performance summary at TA=25°C.

**Test procedure**

Demonstration circuit EVAL-LTC7067-AZ is easy to setup for evaluating the LTC7067. Please refer to Figure 1 for the proper measurement equipment setup and Table 2 for the list of equipment. The test procedure is below.

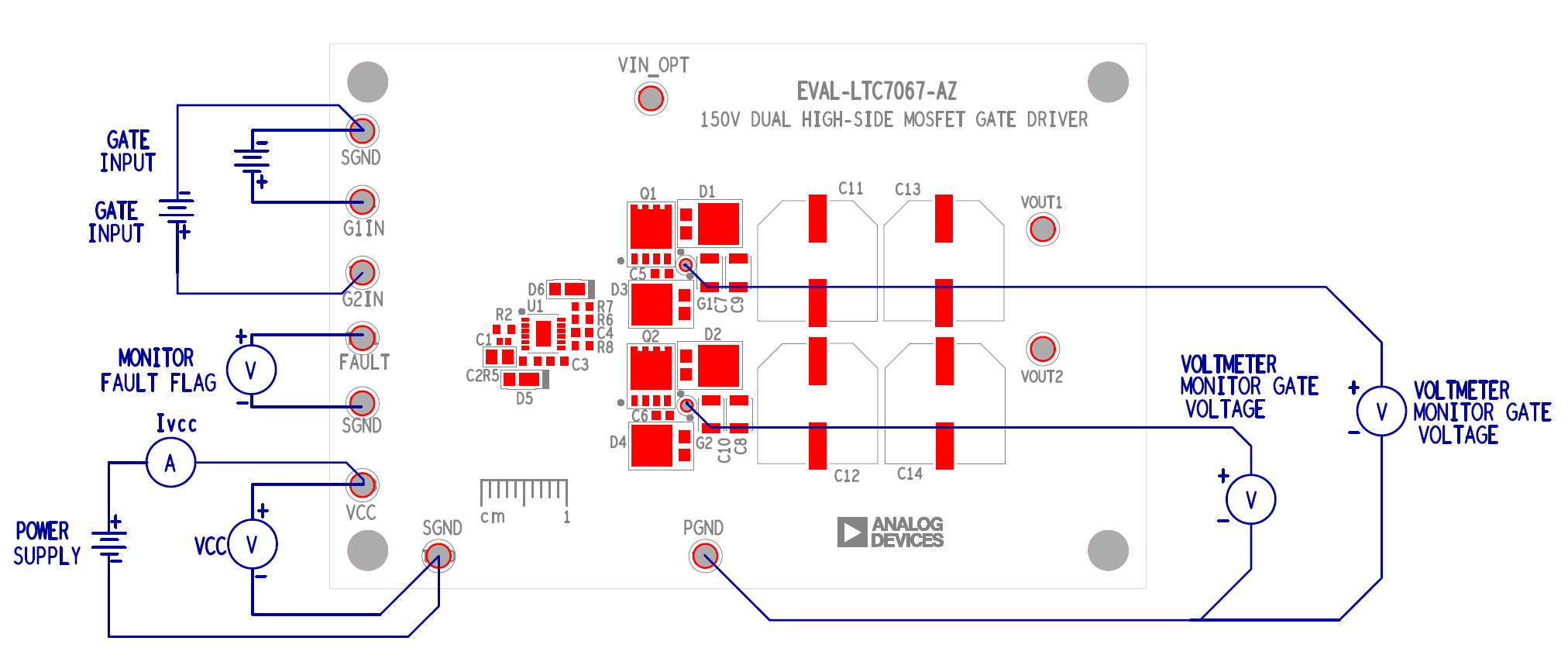
1. With power off, connect the input power supply to VCC (4.5V to 14V) and GND (input return).
2. With power off, connect another input power supply to G1IN and GND. Refer to Figure 1.
3. With power off, connect another input power supply to G2IN and GND. Refer to Figure 1.
4. Connect the DVMs to the FAULT turret.
5. Turn on the first input power supply connected to VCC and adjust voltage to 4V.

NOTE: Make sure the input voltage does not exceed 16V.

1. Measure the voltage at the FAULT turret, it should be below 0.2V.
2. Slowly increase the power supply connected to VCC to 10V.

NOTE: Make sure the input voltage does not exceed 16V.

1. Measure the voltage at the FAULT turret, it should above 9.8V and below 10.2V.
2. Turn on the power supply that connected to G1IN and increase it to 5V.
3. Measure the voltage at G1 test point, it should be above 9.4V and below 9.8V. Refer to Figure 1.
4. Slowly reduce the power supply connected to G1IN to 0V.
5. Measure the voltage at G1 test point, it should be less than 0.2V. Refer to Figure 1.
6. Turn on the power supply that connected to G2IN and increase it to 5V.
7. Measure the voltage at G2 test point, it should be above 9.4V and below 9.8V. Refer to Figure 1.
8. Slowly reduce the power supply connected to G2IN to 0V.
9. Measure the voltage at G2 test point, it should be less than 0.2V. Refer to Figure 1.
10. Slowly increase the power supply connected to VCC to 15V.
11. Measure the voltage at the FAULT turret, it should be below 0.2V.
12. After completing all tests, adjust the power supply to 0V, power off the input power supply.



1. Proper measurement equipment setup.

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| --- | --- |
| **Equipment** | **Quantity** |
| Input voltage supply, Vout = 0V to > 15V | 1 |
| Input voltage supply, Vout = 0V to > 5V | 2 |
| Voltmeters for FAULT and G1/G2 voltages | 3 |

1. Equipment list.