**Document No. : 18-068109-01 Rev A**

**Title : ADL8107-EVALZ Customer Evaluation Board Test Procedure**

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| REVISION HISTORY | | | | |
| **Revision** | **ECR #** | **Description of Change** | **Date** | **Author** |
| A | ECR-104325 | Initial Release | 7/29/21 | Philip Justin Cochangco |
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| **Required Approvers** | |
| **Approver Roles** | **Approver Names** |
| Product Engineer | Philip Justin Cochangco |
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**Test 1: S-parameter Sweep:**

**Equipment Needed:**

1 Power Supply: Keithley 2400 or equivalent – PS1

1x 2-port Network Analyzer – N5245B or its equivalent

**Setup:**

Connect the Network Analyzer as shown;

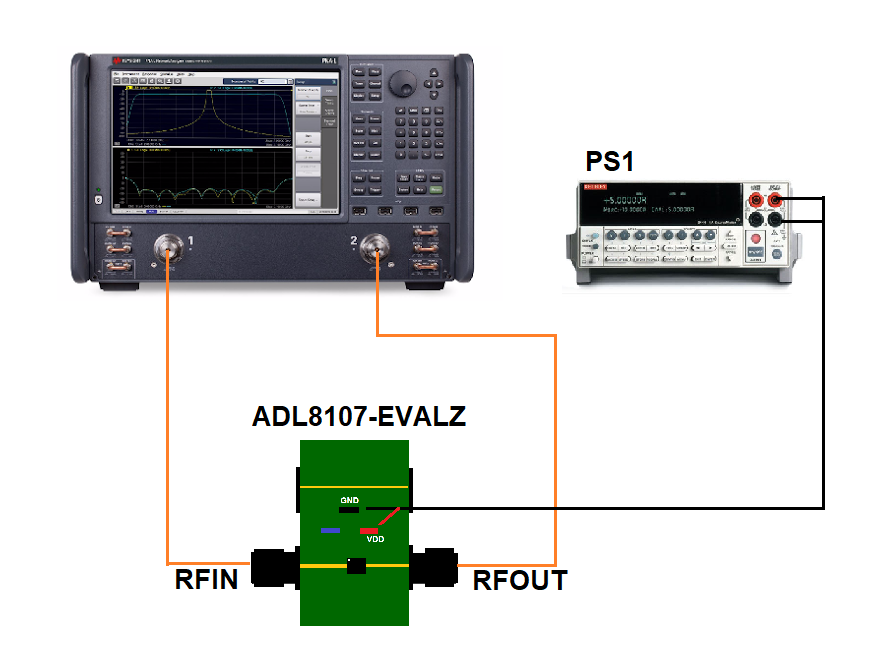
Port 1 – RFin

Port 2 – RFout

Connect the Keithley Power supply as shown;

+ output – Vdd

Ground - GND



**Network Analyzer Settings:**

Min/Max Frequency: 8GHz – 18GHz

Number of Points: 201 points

Input Power: -25dBm

**Setting up notes:**

1. Calibrate the Network Analyzer to compensate for the loss of both input and output cables
2. Record the S11,S12,S21(Gain),S22 of the DUT. Compare the S21 data with the limits in the next section.
3. Measure the S21 of the thru cal path and compensate the loss of the cal path in the measurement of the DUT.

Bias the part according to the Biasing steps below.   
**Biasing steps:**

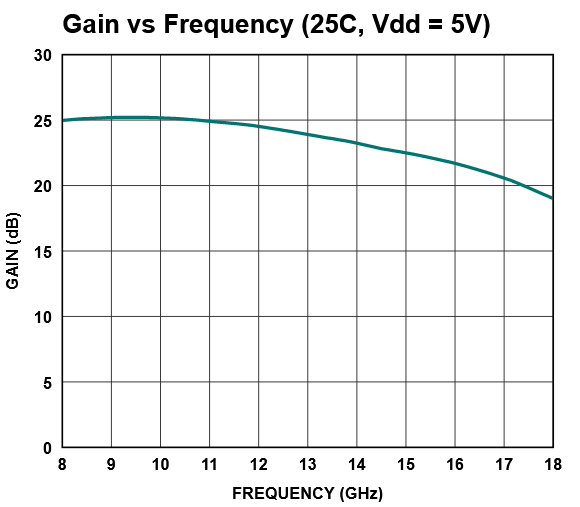
**Power on:**

1. Set Vdd = 5V
2. Measure Idd , typical of 90mA
3. Apply the RF signal.

**Power off:**

1. Turn off the RF signal.
2. Set Vdd = 0V

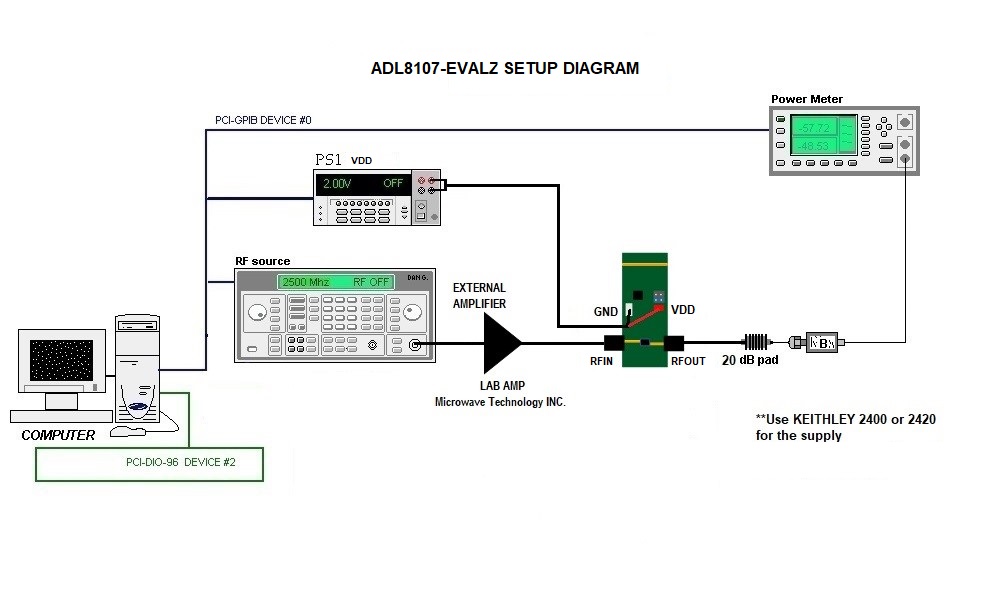
**Gain Plot** **(S21)**



**Test 2: ATE Test Setup:**

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| **Model Name** | **C-Spec** | **Tester Program** |
| ADL8107-EVALZ | C-09705 | **ADL8107-EVALZ.par** |

Test set-up:



Test Parameters:

