### Document No. : 18-082339-01 A

### Title : EVAL-AD45336EBZ Customer Evaluation Board Test Procedure

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| REVISION HISTORY | | | | |
| **Revision** | **ECR #** | **Description of Change** | **Date** | **Author** |
| A |  | Initial Release | 4/16/24 | Denyelle Dalisay |
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| **Required Approvers** | |
| **Approver Roles** | **Approver Names** |
| Apps Engineer | Ian Vincent Andal |
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# Hardware List

* Power Supply and Connectors
* EVAL-AD45336EBZ
* Digital Multimeter

# Input/Output Ports

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Figure 1. EVAL-AD45336EBZ P1 (Input) and P2 (Output)

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# EVAL-AD45336EBZ Test Procedure

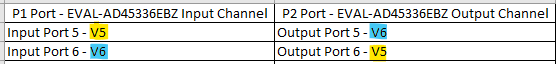
This test will get the channel division of ratio of the DUT which should be approximately **52**. To get the value of the channel division ratio of each channel use the formula shown:

**Channel Division Ratio =**

**Condition 1.** Input voltage is at a constant value of **10 V**. Measure the output voltage on output ports on “P2” as shown on the Figure 1. **Channel Division of less than 51.4 and greater than 52.6 is considered** **FAILED**.

In the table below, “**Input Port x**” and “**Output Port x**” refer to the input and output port number on **P1 and P2** respectively. “**Vx**” refers to the actual channel number. To find the corresponding output channel on **P2**, look for the same “**Vx**” channel number.

For example, to operate Channel “**V5**”, apply input voltage to “**Input Port 5**” and measure the output at “**Output Port 6**”. Similarly, to operate Channel “**V6**”, apply input voltage to “**Input Port 6**” and measure the output at “**Output Port 5**”. Continue this pattern for other channels.



**Condition 2.** Quickly check adjacent channels (whenever applicable; up, down, and left/right) and should be **0V (PASSED); > 0V (FAILED).** Refer to the figure below for more details:

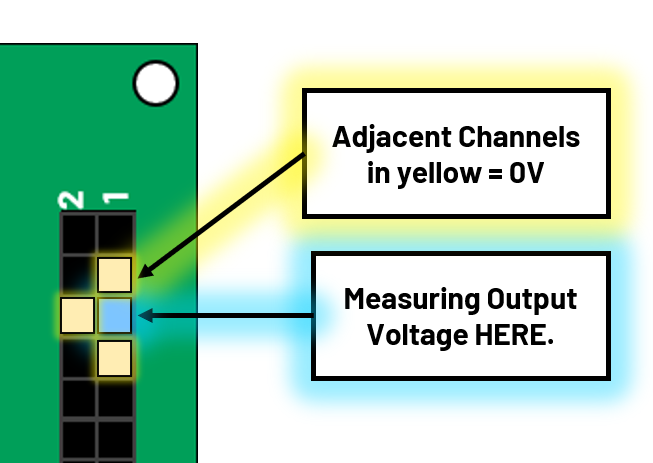


Figure 2. Example of Adjacent Channels

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| --- | --- | --- | --- | --- |
| P1 Port - EVAL-AD45336EBZ Input Channel | P2 Port - EVAL-AD45336EBZ Output Channel | Output Voltage | Channel Division Ration | Comments (PASSED/ FAILED) |
| Input Port 5 - V5 | Output Port 5 - V6 |  |  |  |
| Input Port 6 - V6 | Output Port 6 - V5 |  |  |  |
| Input Port 7 - V10 | Output Port 7 - V2 |  |  |  |
| Input Port 8 - V2 | Output Port 8 - V10 |  |  |  |
| Input Port 9 - V0 | Output Port 9 - V3 |  |  |  |
| Input Port 10 - V3 | Output Port 10 - V0 |  |  |  |
| Input Port 11 - V4 | Output Port 11 - V1 |  |  |  |
| Input Port 12 - V1 | Output Port 12 - V4 |  |  |  |
| Input Port 13 - V7 | Output Port 13 - V16 |  |  |  |
| Input Port 14 - V8 | Output Port 14 - V15 |  |  |  |
| Input Port 15 - V12 | Output Port 15 - V13 |  |  |  |
| Input Port 16 - V9 | Output Port 16 - V11 |  |  |  |
| Input Port 17 - V13 | Output Port 17 - V12 |  |  |  |
| Input Port 18 - V11 | Output Port 18 - V9 |  |  |  |
| Input Port 19 - V16 | Output Port 19 - V7 |  |  |  |
| Input Port 20 - V15 | Output Port 20 - V8 |  |  |  |
| Input Port 21 - V14 | Output Port 21 - V22 |  |  |  |
| Input Port 22 - V17 | Output Port 22 - V26 |  |  |  |
| Input Port 23 - V21 | Output Port 23 - V19 |  |  |  |
| Input Port 24 - V20 | Output Port 24 - V25 |  |  |  |
| Input Port 25 - V25 | Output Port 25 - V20 |  |  |  |
| Input Port 26 - V19 | Output Port 26 - V21 |  |  |  |
| Input Port 27 - V26 | Output Port 27 - V17 |  |  |  |
| Input Port 28 - V22 | Output Port 28 - V14 |  |  |  |
| Input Port 29 - V23 | Output Port 29 - V29 |  |  |  |
| Input Port 30 - V29 | Output Port 30 - V23 |  |  |  |
| Input Port 31 - V31 | Output Port 31 - V24 |  |  |  |
| Input Port 32 - V24 | Output Port 32 - V31 |  |  |  |
| Input Port 33 - V30 | Output Port 33 - V18 |  |  |  |
| Input Port 34 - V18 | Output Port 34 - V30 |  |  |  |
| Input Port 35 - V27 | Output Port 35 - V28 |  |  |  |
| Input Port 36 - V28 | Output Port 36 - V27 |  |  |  |