

Overview of AD5111/AD5113/AD5115 Connections and Functionality

GENERAL DESCRIPTION

This quick start guide provides a general overview of AD5111/AD5113/AD5115 connections and functionality and should be reviewed in conjunction with the AD5111/AD5113/AD5115 data sheet.

FUNCTIONAL BLOCK DIAGRAM

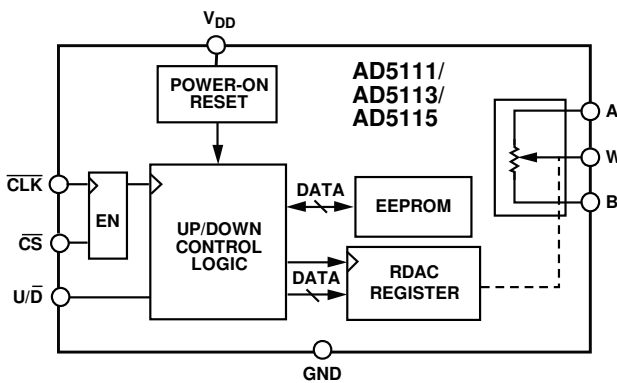
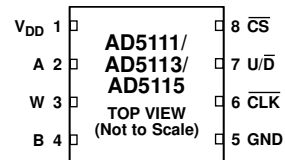


Figure 1.

10548-001

PIN CONFIGURATION



NOTES
1. THE EXPOSED PAD IS INTERNALLY FLOATING.

10548-003

Figure 2.

PIN FUNCTION DESCRIPTIONS

Table 1.

| Pin No. | Mnemonic | Description |
|---------|-----------------|----------------------------------|
| 1 | V _{DD} | Positive power supply. |
| 2 | A | Terminal A of RDAC. |
| 3 | W | Wiper terminal of RDAC. |
| 4 | B | Terminal B of RDAC. |
| 5 | GND | Ground pin. |
| 6 | CLK | Clock input. |
| 7 | U/D | Up/down selection. |
| 8 | CS | Chip select. |
| | EPAD | Internally floating exposed pad. |

TYPICAL EXTERNAL CONNECTIONS

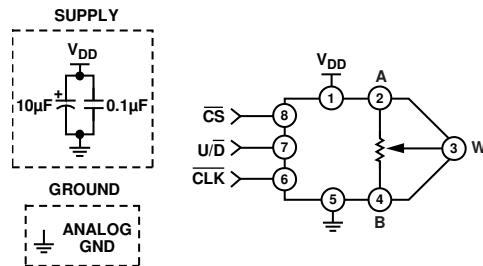


Figure 3.

10548-002

OPERATIONAL CONDITIONS

Table 2. Specifications

| Parameter | Specification |
|---|------------------------|
| V _{DD} to GND | 2.3 V to 5.5 V |
| V _A , V _W , V _B to GND | GND to V _{DD} |
| Maximum Continuous I _A , I _W , I _B | |
| R _{AW} = 5 kΩ and 10 kΩ | ±6 mA |
| R _{AW} = 80 kΩ | ±1.5 mA |
| Maximum Clock (CLK) | 50 MHz |

COMMANDS

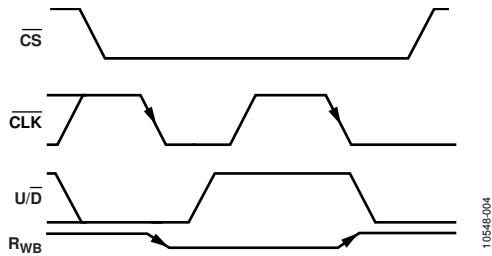


Figure 4. Increment and Decrement

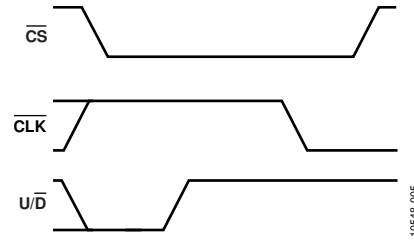


Figure 5. Shutdown

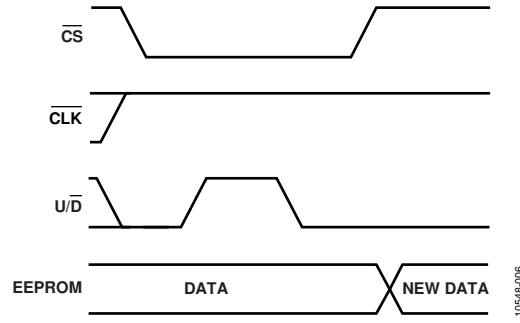


Figure 6. Store

REVISION HISTORY

3/12—Revision 0: Initial Version



ESD Caution

ESD (electrostatic discharge) sensitive device. Charged devices and circuit boards can discharge without detection. Although this product features patented or proprietary protection circuitry, damage may occur on devices subjected to high energy ESD. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.

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