



Product/Process Change Notice - PCN 24_0198 Rev. -

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This notice is to inform you of a change that will be made to certain ADI products (see Appendix A) that you may have purchased in the last 2 years. **Any inquiries or requests with this PCN (additional data or samples) must be sent to ADI within 30 days of publication date.** ADI contact information is listed below.

PCN Title:	AD8410A/AD8411A Data Sheet Revision
Publication Date:	23-Sep-2024
Effectivity Date:	26-Dec-2024 <i>(the earliest date that a customer could expect to receive changed material)</i>
Revision Description:	Initial Release.

Description Of Change:

Data Sheet correction on Table 1. Electrical Specifications:

1. Input Bias Current Line Specification changed to 350uA. See attached Data Sheet comparison document in the Supporting Documents section of this PCN.

Reason For Change:

Data sheet indicates Total Input-Bias Current which is the sum of two input bias current values. Currently, the data sheet reflects ibias current per pin.

Impact of the change (positive or negative) on fit, form, function & reliability:

No impact on fit, form, function and reliability when operated within data sheet specifications. There are no changes to bond pad locations and bonding diagram.

Summary of Supporting Information:

Data Sheet specification change will be reflected in revision B of the Product Data Sheet. See attached Data Sheet Comparison.

Supporting Documents

Attachment 1: Type: Datasheet Specification Comparison

[ADI_PCN_24_0198_Rev_-AD8410A-AD8411A Datasheet Change \(Ibias Line Spe...](#)

Note: If applicable, the device material declaration will be updated due to material change.

ADI Contact Information:

For questions on this PCN, please send an email to the regional contacts below or contact your local ADI sales representatives.

Americas:	Europe:	Japan:	Korea:	Rest of Asia:
PCN_Americas@analog.com	PCN_Europe@analog.com	PCN_Japan@analog.com	PCN_Korea@analog.com	PCN_ROA@analog.com

Appendix A - Affected ADI Models:

Added Parts On This Revision - Product Family / Model Number (8)

AD8410A / AD8410AWBRMZ

AD8410A / AD8410AWBRMZ-RL

AD8410A / AD8410AWBRZ

AD8410A / AD8410AWBRZ-RL

AD8411A / AD8411AWBRMZ

AD8411A / AD8411AWBRMZ-RL

AD8411A / AD8411AWBRZ

AD8411A / AD8411AWBRZ-RL

Appendix B - Revision History:

Rev	Publish Date	Effectivity Date	Rev Description
Rev. -	23-Sep-2024	26-Dec-2024	Initial Release.

AD8410A-AD8411A

Datasheet Change (Ibias Line Spec)

August 2024

AD8410A DS Change on Ibias Line Spec

Data Sheet

AD8410A

SPECIFICATIONS

$T_A = -40^{\circ}\text{C}$ to $+125^{\circ}\text{C}$ (operating temperature range), supply voltage (V_S) = 5 V, ground (GND) = 0 V, Input Common-Mode Voltage (V_{CM}) = $-IN$, $+IN = 12\text{ V}$, and $V_{REF1} = V_{REF2} = 2.5\text{ V}$, unless otherwise noted.

Table 1. Electrical Specifications

Parameter	Test Conditions/Comments	Min	Typ	Max	Unit
GAIN	Initial		20		V/V
	Error Over Temperature			0.13	%
	Gain vs. Temperature			± 6	ppm/ $^{\circ}\text{C}$
VOLTAGE-OFFSET	Referred to input (RTI)				
	Over Temperature			± 200	μV
	Offset Drift		± 0.21	± 0.71	$\mu\text{V}/^{\circ}\text{C}$
	Box method (see Figure 56)			± 1.84	$\mu\text{V}/^{\circ}\text{C}$
	Bowtie method (-40°C to 25°C) (see Figure 57)			± 1.51	$\mu\text{V}/^{\circ}\text{C}$
INPUT	Total Input-Bias Current ²	-10.0			μA
	$+IN = -IN = 0\text{ V}$, $V_S = V_{REF1} = 5\text{ V}$, $V_{REF2} = 0\text{ V}$		44		μA
	$+IN = -IN = 12\text{ V}$, $V_S = V_{REF1} = V_{REF2} = 0\text{ V}$, $T_A = 25^{\circ}\text{C}$			175	μA
	$+IN = -IN = 12\text{ V}$, $V_S = V_{REF1} = 5\text{ V}$, $V_{REF2} = 0\text{ V}$				μA
	$+IN = -IN = 48\text{ V}$, $V_S = V_{REF1} = V_{REF2} = 0\text{ V}$, $T_A = 25^{\circ}\text{C}$		178		μA
	$+IN = -IN = 48\text{ V}$, $V_S = V_{REF1} = 5\text{ V}$, $V_{REF2} = 0\text{ V}$			484	μA
	Input Offset Current			1.0	μA
	$+IN = -IN = 0\text{ V}$			2.5	μA
	$+IN = -IN = 12\text{ V}$			2.7	μA
	$+IN = -IN = 48\text{ V}$				μA
Input Voltage Range	Common mode, continuous	-2		$+70$	V
Common-Mode Rejection Ratio (CMRR)	Specified temperature range, DC, $V_{CM} = -2\text{ V}$ to $+70\text{ V}$	123	142		dB
	$T_A = 25^{\circ}\text{C}$, frequency = 10 kHz		110		dB
	$T_A = 25^{\circ}\text{C}$, frequency = 50 kHz		96		dB

Change to 350uA

AD8411A DS Change on Ibias Line Spec

Data Sheet

AD8411A

SPECIFICATIONS

$T_A = -40^{\circ}\text{C}$ to $+125^{\circ}\text{C}$ (Operating Temperature Range), supply voltage (V_S) = 5 V, ground (GND) = 0 V, Input Common-Mode Voltage (V_{CM}) = -IN, +IN = 12 V, and $V_{REF1} = V_{REF2} = 2.5$ V, unless otherwise noted.

Table 1. Electrical Specifications

Parameter	Test Conditions/Comments	Min	Typ	Max	Unit
GAIN	Initial		50		V/V
	Error Over Temperature			0.15	%
	Gain vs. Temperature			± 6	ppm/ $^{\circ}\text{C}$
VOLTAGE-OFFSET	Referred to input (RTI)				
	Over Temperature			± 200	μV
	Offset Drift		± 0.26	± 0.75	$\mu\text{V}/^{\circ}\text{C}$
	Box method (see Figure 56)			± 2.03	$\mu\text{V}/^{\circ}\text{C}$
INPUT	Bowtie method (-40°C to 25°C) (see Figure 57)			± 1.65	$\mu\text{V}/^{\circ}\text{C}$
	Bowtie method (25°C to 125°C) (see Figure 57)				
	Total Input-Bias Current ²				
	+IN = -IN = 0 V, $V_S = V_{REF1} = 5$ V, $V_{REF2} = 0$ V	-11.0			μA
	+IN = -IN = 12 V, $V_S = V_{REF1} = V_{REF2} = 0$ V, $T_A = 25^{\circ}\text{C}$		44		μA
Input Offset Current	+IN = -IN = 12 V, $V_S = V_{REF1} = 5$ V, $V_{REF2} = 0$ V			175	μA
	+IN = -IN = 48 V, $V_S = V_{REF1} = V_{REF2} = 0$ V, $T_A = 25^{\circ}\text{C}$		178		μA
	+IN = -IN = 48 V, $V_S = V_{REF1} = 5$ V, $V_{REF2} = 0$ V			484	μA
	+IN = -IN = 0 V			1.0	μA
	+IN = -IN = 12 V			2.5	μA
	+IN = -IN = 48 V			2.7	μA
	Input Voltage Range	-2		+70	V
Common-Mode Rejection Ratio (CMRR)	Common mode, continuous				
	Specified temperature range, DC, $V_{CM} = -2$ V to $+70$ V	123	142		dB
	$T_A = 25^{\circ}\text{C}$, frequency = 10 kHz		110		dB
	$T_A = 25^{\circ}\text{C}$, frequency = 50 kHz		96		dB

Change to 350uA