

PCN Number:	20240209000.0	PCN Date:	February 09, 2024
Title:	Datasheet for INA114		
Customer Contact:	Change Management team	Dept:	Quality Services
Change Type:	Electrical Specification		

PCN Details

Description of Change:

Texas Instruments Incorporated is announcing an information only notification. The product datasheet(s) is being updated as summarized below. The following change history provides further details.



INA114
SBOS014A – SEPTEMBER 2000 – REVISED JANUARY 2024

Changes from Revision * (March 1998) to Revision A (January 2024)	Page
• Updated the numbering format for tables, figures, and cross-references throughout the document.....	1
• Added the <i>ESD Ratings, Recommended Operating Conditions, Thermal Information, Application and Implementation, Typical Applications, Device and Documentation Support, and Mechanical, Packaging, and Orderable Information</i> sections.....	1
• Changed SOL package name to SOIC throughout data sheet.....	1
• Added "for high gains" to low offset voltage and low drift bullets in <i>Features</i>	1
• Changed low drift bullet value from 0.25µV/°C to 0.3µV/°C in <i>Features</i>	1
• Updated bullets in <i>Applications</i>	1
• Added symbols in <i>Absolute Maximum Ratings</i>	3
• Changed supply voltage to show dual supply and single supply in <i>Absolute Maximum Ratings</i>	3
• Changed "Input Voltage Range" to "Signal input pins" in <i>Absolute Maximum Ratings</i>	3
• Added signal output voltage to <i>Absolute Maximum Ratings</i>	3
• Changed output short-circuit from "ground" to " $V_S / 2$ " in <i>Absolute Maximum Ratings</i>	3
• Added DW (SOIC) package ambient thermal resistance value.....	3
• Changed ambient thermal resistance value for P (PDIP) package from 80°C/W to 110.2°C/W.....	3
• Added symbols in <i>Electrical Characteristics</i>	4
• Changed offset voltage maximum value from $\pm 50 + 100/G$ to $\pm 50 + 150/G$	4
• Changed "Offset Voltage vs Temperature" to "Offset voltage drift".....	4
• Changed offset voltage drift test condition from $T_A = T_{MIN}$ to T_{MAX} to $T_A = -40^\circ\text{C}$ to $+85^\circ\text{C}$	4

• Changed offset voltage drift maximum value from $\pm 0.25 + 5/G$ to $\pm 0.3 + 5/G$	4
• Deleted safe input voltage from <i>Electrical Characteristics</i>	4
• Changed "Input Common-Mode Range" to "Operating input voltage".....	4
• Changed "Offset Voltage vs Power Supply" to "Power-supply rejection ratio".....	4
• Changed "Bias current vs Temperature" to "Input bias current drift".....	4
• Added " $T_A = -40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$ " test condition to input bias current drift.....	4
• Changed "Offset Current vs Temperature" to "Input offset current drift".....	4
• Added " $T_A = -40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$ " test condition to input offset current drift.....	4
• Added " $V_O = \pm 10\text{V}$ " test condition to gain error.....	4
• Changed "Gain vs Temperature" to "Gain drift"	4
• Added " $V_O = -10\text{V}$ to $+10\text{V}$ " test condition to gain nonlinearity.....	4
• Changed output voltage values from ± 13.5 (min) and ± 13.7 (typ) to $(V-) + 1.5$ (min) and $(V+) - 1.5$ (max).....	4
• Changed output voltage test condition from T_{MIN} to T_{MAX} to $T_A = -40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$	4
• Added output voltage test conditions for $V_S = \pm 11.4\text{V}$ and $V_S = \pm 2.25\text{V}$	4
• Added $V_{\text{STEP}} = 10\text{V}$ test condition to settling time.....	4
• Deleted power supply voltage range typical value of $\pm 15\text{V}$	4
• Moved voltage range, operating temperature range, and thermal resistance from <i>Electrical Characteristics</i> to <i>Recommended Operating Conditions and Thermal Information</i>	4
• Updated Figure 5-6, <i>Input-referred Noise Voltage vs Frequency</i>	6
• Updated Figure 5-10, <i>Input Bias Current vs Differential Input Voltage</i>	6
• Updated Figure 5-11, <i>Input Bias Current vs Common-Mode Input Voltage</i>	6
• Updated Figure 5-19 to Figure 22, Small- and Large-Signal Response plots.....	6

The datasheet number will be changing.

Device Family	Change From:	Change To:
INA114	SBOS014	SBOS014A

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/product/INA114>

Reason for Change:

To accurately reflect device characteristics.

Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):

No anticipated impact. This is a specification change announcement only. There are no changes to the actual device

Changes to product identification resulting from this PCN:

None.

Product Affected:

INA114AP	INA114AU	INA114AU/1K	INA114AUE4
INA114BP	INA114BU	INA114BU/1K	

For questions regarding this notice, e-mails can be sent to the Change Management team or your local Field Sales Representative.

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