Product/Process Change Notice - PCN 22_0086 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: LTC2980 Datasheet Limit Change

Publication Date: 27-Apr-2022

Effectivity Date: 30-Jul-2022 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:
Initial Release

Description Of Change:

Please be advised that Analog Devices has made minor changes to the LTC2980 product datasheet to facilitate improvement in manufacturing capability. The changes are shown on the attached pages of the marked-up datasheet.

Electrical Characteristics table changes (pages 5 of datasheet):
1. Output Sinking Current at condition: Weak Pull-Down Enabled minimum spec limit changed from 33uA to 28uA. Typical value changed from 50uA to 43uA.
2. Output Sinking Current at condition: Strong Pulldown Enabled temperature condition changed from Tri-temperature to Room temperature only. Also, remove the minimum and maximum specification.

Reason For Change:

To facilitate improvement in manufacturing capability.

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

This datasheet change does not impact the fit, form, function, or reliability of the LTC2980

Product Identification *(this section will describe how to identify the changed material)*

Product shipped after effectivity date will be tested to the new limits.
Can be identified with date code and lot traceability identification.

Summary of Supporting Information:

Changes will be reflected on the new product datasheet. See changes on Electrical Characteristics table on page 5.

Supporting Documents

Attachment 1: Type: Datasheet Specification Comparison

ADI_PCN_22_0086_Rev_-_LTC2980__Datasheet Marked-up_Pages.pdf

For questions on this PCN, please send an email to the regional contacts below or contact your local ADI sales representatives.			
Americas:	**Europe:**	**Japan:**	**Rest of Asia:**
PCN_Americas@analog.com	PCN_Europe@analog.com	PCN_Japan@analog.com	PCN_ROA@analog.com

Appendix A - Affected ADI Models				
Added Parts On This Revision - Product Family / Model Number (2)				
LTC2980 / LTC2980CY#PBF	LTC2980 / LTC2980IY#PBF			

Appendix B - Revision History			
Rev	**Publish Date**	**Effectivity Date**	**Rev Description**
Rev. -	27-Apr-2022	30-Jul-2022	Initial Release

ELECTRICAL CHARACTERISTICS

The ● denotes the specifications which apply over the full operating temperature range, otherwise specifications are at T_J = 25°C. V_{PWR} = V_{IN_SNS} = 12V, V_{DD33}, V_{DD25} and REF pins floating, unless otherwise indicated. (Notes 2, 3)

SYMBOL	PARAMETER	CONDITIONS		MIN	TYP	MAX	UNITS
V_{IN_SNS} Input Characteristics							
V_{VIN_SNS}	V_{IN_SNS} Input Voltage Range		●	0		15	V
R_{VIN_SNS}	V_{IN_SNS} Input Resistance		●	70	90	110	kΩ
TUE_{VIN_SNS}	VIN_ON, VIN_OFF Threshold Total Unadjusted Error	3V ≤ V_{VIN_SNS} ≤ 8V	●			±2.0	% of Reading
		V_{VIN_SNS} > 8V	●			±1.0	% of Reading
	READ_VIN Total Unadjusted Error	3V ≤ V_{VIN_SNS} ≤ 8V	●			±1.5	% of Reading
		V_{VIN_SNS} > 8V	●			±1.0	% of Reading
Temperature Sensor Characteristics							
TUE_TS	Total Unadjusted Error				±1		°C
V_{OUT} Enable Output (V_{OUT_EN} [3:0]) Characteristics							
V_{VOUT_ENn}	Output High Voltage (Note 9)	I_{VOUT_ENn} = –5µA, V_{DD33} = 3.3V	●	10	12.5	14.7	V
I_{VOUT_ENn}	Output Sourcing Current	V_{VOUT_ENn} Pull-Up Enabled, V_{VOUT_ENn} = 1V	●	–5	–6	–8	µA
	Output Sinking Current	Strong Pull-Down Enabled, V_{VOUT_ENn} = 0.4V	●	3	5	8	mA
		Weak Pull-Down Enabled, V_{VOUT_ENn} = 0.4V	●	~~33~~ 28	~~50~~ 43	60	µA
	Output Leakage Current	Internal Pull-Up Disabled, 0V ≤ V_{VOUT_ENn} ≤ 15V	●			±1	µA
V_{OUT} Enable Output (V_{OUT_EN} [7:4]) Characteristics							
I_{VOUT_ENn}	Output Sinking Current	Strong Pull-Down Enabled, V_{OUT_ENn} = 0.1V	●	~~3~~	6	~~9~~	mA
	Output Leakage Current	0V ≤ V_{VOUT_ENn} ≤ 6V	●			±1	µA
V_{IN} Enable Output (V_{IN_EN}) Characteristics							
V_{VIN_EN}	Output High Voltage	I_{VIN_EN} = –5µA, V_{DD33} = 3.3V	●	10	12.5	14.7	V
I_{VIN_EN}	Output Sourcing Current	V_{IN_EN} Pull-Up Enabled, V_{VIN_EN} = 1V	●	–5	–6	–8	µA
	Output Sinking Current	V_{VIN_EN} = 0.4V	●	3	5	8	mA
	Leakage Current	Internal Pull-Up Disabled, 0V ≤ V_{VIN_EN} ≤ 15V	●			±1	µA
EEPROM Characteristics							
Endurance	(Notes 10, 11)	0°C < T_J < 85°C During EEPROM Write Operations	●	10,000			Cycles
Retention	(Notes 10, 11)	T_J < 105°C	●	20			Years
t_{MASS_WRITE}	Mass Write Operation Time (Note 12)	STORE_USER_ALL, 0°C < T_J < 85°C During EEPROM Write Operations	●		440	4100	ms
Digital Inputs SCL, SDA, CONTROL0, CONTROL1, WDI/RESETB, FAULTB00, FAULTB01, FAULTB10, FAULTB11, WP							
V_{IH}	High Level Input Voltage		●	2.1			V
V_{IL}	Low Level Input Voltage		●			1.5	V
V_{HYST}	Input Hysteresis				20		mV
I_{LEAK}	Input Leakage Current	0V ≤ V_{PIN} ≤ 5.5V, SDA, SCL, CONTROL*n* Pins Only	●			±2	µA
		0V ≤ V_{PIN} ≤ V_{DD33} + 0.3V, FAULTB*zn*, WDI/RESETB, WP Pins Only	●			±2	µA