Product/Process Change Notice - PCN 23_0170 Rev. -

Analog Devices, Inc. One Analog Way, Wilmington, MA 01887, USA

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:	LTC6801 Data Sheet Revision
Publication Date:	13-Sep-2023
Effectivity Date:	13-Sep-2023 *(the earliest date that a customer could expect to receive changed material)*
Revision Description:	Initial Release.

Description Of Change:

Lower maximum current load allowed on VREG from 2mA to 1mA.

Reason For Change:

The data sheet is being updated to accurately reflect device capability.

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

This data sheet change does not impact form or reliability.

Summary of Supporting Information:

See attached data sheet comparison for changes on Electrical Characteristics table. Changes to VREG Load current will be reflected in product data sheet revision F.

Supporting Documents

Attachment 1: Type: Datasheet Specification Comparison

ADI_PCN_23_0170_Rev_-_LTC6801_DataSheet_Changes (Rev F).pdf...

Attachment 2: Type: Delta Qualification Matrix

ADI_PCN_23_0170_Rev_-_LTC6801 PCN-Delta-Qualification-Matrix-ZVEI-5_0_...

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:	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 (8)

LTC6801 / LTC6801HG#3ZZPBF	LTC6801 / LTC6801HG#3ZZTRPBF	LTC6801 / LTC6801HG#PBF	LTC6801 / LTC6801HG#TRPBF	LTC6801 / LTC6801IG#3ZZPBF
LTC6801 / LTC6801IG#3ZZTRPBF	LTC6801 / LTC6801IG#PBF	LTC6801 / LTC6801IG#TRPBF		

Appendix B - Revision History:			
Rev	**Publish Date**	**Effectivity Date**	**Rev Description**
Rev. -	13-Sep-2023	13-Sep-2023	Initial Release.

ANALOG DEVICES

AHEAD OF WHAT'S POSSIBLE™

LTC6801 Data Sheet Changes (Rev F)

23_0170

▶ Rev E: OLD SPECIFICATIONS

LTC6801

ELECTRICAL CHARACTERISTICS The ● denotes the specifications which apply over the full operating temperature range, otherwise specifications are at T_A = 25°C, V^+ = 43.2V, V^- = 0V unless otherwise noted.

SYMBOL	PARAMETER	CONDITIONS		MIN	TYP	MAX	UNITS
DC Specifications							
V_{ERR}	Overvoltage (OV) or Undervoltage (UV) Detection Level Error	(Note 2) 2.106V ≤ V_{CELL} ≤ 4.498V 2.106V ≤ V_{CELL} ≤ 4.498V 1.531V ≤ V_{CELL} < 2.106V 1.531V ≤ V_{CELL} < 2.106V V_{CELL} = 0.766V V_{CELL} = 0.766V	 ● ● ●	 –0.8 –1 –1 –1.3 –1.5 –2		 0.8 1 1 1.3 1.5 2	 % % % % % %
V_S	Supply Voltage, V^+ Relative to V^-	V_{ERR} Specifications Met	●	10		50	V
V_{CELL}	Cell Voltage Range	Full Scale Voltage Range			5		V
V_{CM}	Common Mode Voltage Range Measured Relative to V^-	V_{ERR} Specifications Met Range of Inputs Cn, n = 3 to 11 Range of Input C2 Range of Input C1	 ● ● ●	 1.8 1.2 0		 5 • n 10 5	 V V V
V_{TV}	Temperature Input Detection Level Error (Relative to V_{REF}/2)	10V < V^+ < 50V	●	–13		17	mV
HYS	UV/OV Detection Hysteresis Error (Relative to Selected Value)	10V < V^+ < 50V	●	–25		25	%
V_{REF}	Reference Pin Voltage	V_{REF} Pin Loaded With 100k to V^-	 ●	3.043 3.038	3.058 3.058	3.073 3.078	V V
	Reference Voltage Temperature Coefficient				8		ppm/°C
	Reference Voltage Hysteresis				50		ppm
	Reference Voltage Long Term Drift				60		ppm/$\sqrt{khr}$
V_{REG}	Regulator Pin Voltage	10V < V_S < 50V, No Load LTC6801IG LTC6801HG 10V < V_S < 50V, I_{LOAD} = 2mA LTC6801IG LTC6801HG	 ● ● ● ●	 4.5 4.5 4.1 4.1	 5 5 4.8 4.8	 5.5 5.7 	 V V V V

▶ Rev F: NEW SPECIFICATIONS

LTC6801

ELECTRICAL CHARACTERISTICS The ● denotes the specifications which apply over the full operating temperature range, otherwise specifications are at T_A = 25°C, V^+ = 43.2V, V^- = 0V unless otherwise noted.

SYMBOL	PARAMETER	CONDITIONS		MIN	TYP	MAX	UNITS
DC Specifications							
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V_S	Supply Voltage, V^+ Relative to V^-	V_{ERR} Specifications Met	●	10		50	V
V_{CELL}	Cell Voltage Range	Full Scale Voltage Range			5		V
V_{CM}	Common Mode Voltage Range Measured Relative to V^-	V_{ERR} Specifications Met Range of Inputs Cn, n = 3 to 11 Range of Input C2 Range of Input C1	 ● ● ●	 1.8 1.2 0		 5 • n 10 5	 V V V
V_{TV}	Temperature Input Detection Level Error (Relative to V_{REF}/2)	10V < V^+ < 50V	●	–13		17	mV
HYS	UV/OV Detection Hysteresis Error (Relative to Selected Value)	10V < V^+ < 50V	●	–25		25	%
V_{REF}	Reference Pin Voltage	V_{REF} Pin Loaded With 100k to V^-	 ●	3.043 3.038	3.058 3.058	3.073 3.078	V V
	Reference Voltage Temperature Coefficient				8		ppm/°C
	Reference Voltage Hysteresis				50		ppm
	Reference Voltage Long Term Drift				60		ppm/$\sqrt{khr}$
V_{REG}	Regulator Pin Voltage	10V < V_S < 50V, No Load LTC6801IG LTC6801HG 10V < V_S < 50V, I_{LOAD} = ~~2mA~~ LTC6801IG LTC6801HG	 ● ● ● ●	 4.5 4.5 4.1 4.1	 5 5 4.8 4.8	 5.5 5.7 	 V V V V