



## Product/Process Change Notice - PCN 19\_0278 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:** LT8361 Data sheet limit changes.

**Publication Date:** 09-Dec-2019

**Effectivity Date:** 12-Mar-2020 *(the earliest date that a customer could expect to receive changed material)*

**Revision Description:**

LT8361 Data sheet

**Description Of Change:**

Minor changes to the LT8361 product Data sheet.

**Reason For Change:**

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

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

The change described above has no impact on fit, form, or functionality of the device.

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

The product shipped after effectively date will be tested to the new limit.

**Summary of Supporting Information:**

Changes will be reflected on the new product data sheet revision A. See changes on Electrical Characteristics page 3.

**Supporting Documents**

**Attachment 1: Type:** Datasheet Specification Comparison

ADI\_PCN\_19\_0278\_Rev\_-\_LT8361\_Data sheet\_update.pdf

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

**Americas:**  
PCN\_Americas@analog.com

**Europe:**  
PCN\_Europe@analog.com

**Japan:**  
PCN\_Japan@analog.com

**Rest of Asia:**  
PCN\_ROA@analog.com

**Appendix A - Affected ADI Models**

**Added Parts On This Revision - Product Family / Model Number (6)**

LT8361 / LT8361EMSE#PBF	LT8361 / LT8361EMSE#TRPBF	LT8361 / LT8361HMSE#PBF	LT8361 / LT8361HMSE#TRPBF	LT8361 / LT8361IMSE#PBF
LT8361 / LT8361IMSE#TRPBF				

**Appendix B - Revision History**

<b>Rev</b>	<b>Publish Date</b>	<b>Effectivity Date</b>	<b>Rev Description</b>
Rev. -	09-Dec-2019	12-Mar-2020	LT8361 Data sheet

Analog Devices, Inc.

DocId:7907 Parent DocId:None Layout Rev:7

**ELECTRICAL CHARACTERISTICS** The ● denotes the specifications which apply over the full operating temperature range, otherwise specifications are at  $T_A = 25^\circ\text{C}$ .  $V_{IN} = 12\text{V}$ ,  $EN/UVLO = 12\text{V}$  unless otherwise noted.

PARAMETER	CONDITIONS		MIN	TYP	MAX	UNITS
$V_{IN}$ Operating Voltage Range		●	2.8		60	V
$V_{IN}$ Quiescent Current at Shutdown	$V_{EN/UVLO} = 0.2\text{V}$	●		1	2	$\mu\text{A}$
		●		1	15	$\mu\text{A}$
$V_{IN}$ Quiescent Current	$V_{EN/UVLO} = 1.5\text{V}$	●		2	5	$\mu\text{A}$
		●		2	25	$\mu\text{A}$
<b><math>V_{IN}</math> Quiescent Current</b>						
Sleep Mode (Not Switching)	$\text{SYNC} = 0\text{V}$	●		9	15	$\mu\text{A}$
				9	30	$\mu\text{A}$
Active Mode (Not Switching)	$\text{SYNC} = 0\text{V}$ or $\text{INTV}_{CC}$ , $\text{BIAS} = 0\text{V}$	●		1200	1600	$\mu\text{A}$
		●		1200	1850	$\mu\text{A}$
	$\text{SYNC} = 0\text{V}$ or $\text{INTV}_{CC}$ , $\text{BIAS} = 5\text{V}$	●		22	40	$\mu\text{A}$
				22	65	$\mu\text{A}$
BIAS Threshold	Rising, BIAS Can Supply $\text{INTV}_{CC}$			4.4	4.65	V
	Falling, BIAS Cannot Supply $\text{INTV}_{CC}$			4	4.25	V
$V_{IN}$ Falling Threshold to Supply $\text{INTV}_{CC}$	$\text{BIAS} = 12\text{V}$			$\text{BIAS} - 2\text{V}$		V
BIAS Falling Threshold to Supply $\text{INTV}_{CC}$	$V_{IN} = 12\text{V}$			$V_{IN}$		V
<b>FBX Regulation</b>						
FBX Regulation Voltage	$\text{FBX} > 0\text{V}$	●	1.568	1.6	<del>1.632</del> 1.636	V
	$\text{FBX} < 0\text{V}$	●	<del>-0.820</del>	-0.80	-0.780	V
FBX Line Regulation	$\text{FBX} > 0\text{V}$ , $2.8\text{V} < V_{IN} < 60\text{V}$		<del>-0.822</del>	0.005	0.015	%/V
	$\text{FBX} < 0\text{V}$ , $2.8\text{V} < V_{IN} < 60\text{V}$			0.005	0.015	%/V
FBX Pin Current	$\text{FBX} = 1.6\text{V}$ , $-0.8\text{V}$	●	-10		10	nA
<b>Oscillator</b>						
Switching Frequency ( $f_{osc}$ )	$R_T = 165\text{k}$	●	<del>273</del>	300	327	kHz
	$R_T = 45.3\text{k}$	●	<del>0.92</del> 0.90	1	1.08	MHz
	$R_T = 20\text{k}$	●	1.85	2	2.15	MHz
SSFM Maximum Frequency Deviation	$(\Delta f/f_{osc}) \times 100$ , $R_T = 20\text{k}$		14	20	<del>25</del> 28	%
Minimum On-Time	Burst Mode, $V_{IN} = 24\text{V}$ (Note 6)			70	95	ns
	Pulse-Skip Mode, $V_{IN} = 24\text{V}$ (Note 6)			70	90	ns
Minimum Off-Time		●		55	75	ns
SYNC/Mode, Mode Thresholds (Note 5)	High (Rising), $V_{IN} = 24\text{V}$	●		1.3	1.7	V
	Low (Falling), $V_{IN} = 24\text{V}$	●	0.14	0.2		V
SYNC/Mode, Clock Thresholds (Note 5)	Rising, $V_{IN} = 24\text{V}$	●		1.3	1.7	V
	Falling, $V_{IN} = 24\text{V}$	●	0.4	0.8		V
$f_{SYNC}/f_{osc}$ Allowed Ratio	$R_T = 20\text{k}$		0.95	1	1.25	kHz/kHz
SYNC Pin Current	$\text{SYNC} = 2\text{V}$			10	25	$\mu\text{A}$
	$\text{SYNC} = 0\text{V}$ , Current Out of Pin			10	25	$\mu\text{A}$
<b>Switch</b>						
Maximum Switch Current Limit Threshold		●	2	2.5	3.4	A
Switch Overcurrent Threshold	Discharges SS Pin			3.75		A
Switch $R_{DS(ON)}$	$I_{SW} = 0.5\text{A}$			375		$\text{m}\Omega$
Switch Leakage Current	$V_{SW} = 100\text{V}$			0.1	1	$\mu\text{A}$