180912383 Si823x: Adding -2V Transient Withstand Spec to Absolute Maximum Conditions

PCN Issue Date: 9/12/2018 **Effective Date:** 12/18/2018

PCN Type: Datasheet

Description of Change

Silicon Labs is pleased to announce an enhancement to the absolute maximum conditions for the Si823x products. A specification for a -2V transient withstand capability for the driver output pins has been added. Other minor changes have also been made in the datasheet for typographical corrections and format changes for better readability. A complete change list is included in the new revision 2.13 of the datasheet.

Reason for Change

A negative transient withstand capability is desirable for the products that are typically used in high noise system environments. This datasheet revision extends the robustness of our products.

Impact on Form, Fit, Function, Quality, Reliability

No change in form and fit. Function has been extended to include a -2V transient withstand capability as listed in the Absolute Maximum conditions in the datasheet. There is no change to the physical product; only the addition of the specification.

Product Identification

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SI82305B-D-IS1
SI82305B-D-IS1R
SI8230AB-D-IS
SI8230AB-D-IS1
SI8230AB-D-IS1R
SI8230AB-D-ISR
SI8230AD-D-IS
SI8230AD-D-IS3
SI8230AD-D-IS3R
SI8230AD-D-ISR
SI8230BB-AS1
SI8230BB-AS1R
SI8230BB-D-IS
SI8230BB-D-IS1
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SI8230BB-D-ISR
SI8230BB-D-YS0
SI8230BB-D-YS0R
SI8230BB-D-YS1
SI8230BB-D-YS1R
SI8230BD-D-IS
SI8230BD-D-IS3
SI8230BD-D-IS3R
SI8230BD-D-ISR
SI8231AB-D-IS
SI8231AB-D-IS1
SI8231AB-D-IS1R
SI8231AB-D-ISR
SI8231AD-D-IS
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SI8231AD-D-IS3
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SI8231BB-D-IS
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SI8231BD-D-IS
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SI8238BB-D-IS1R
SI8238BD-AS
SI8238BD-ASR
SI8238BD-D-IS
SI8238BD-D-IS3
SI8238BD-D-IS3R
SI8238BD-D-ISR
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Last Date of Unchanged Product: 12/18/2018

Qualification Samples

N/A

Customer Response

Lack of acknowledgment of the PCN within 30 days constitutes acceptance of the change, Ref. JEDEC-J-STD-046.

To request further data or inquire about this notification, please contact your Silicon Labs sales representative. A list of Silicon Labs sales representatives is available at http://www.silabs.com.

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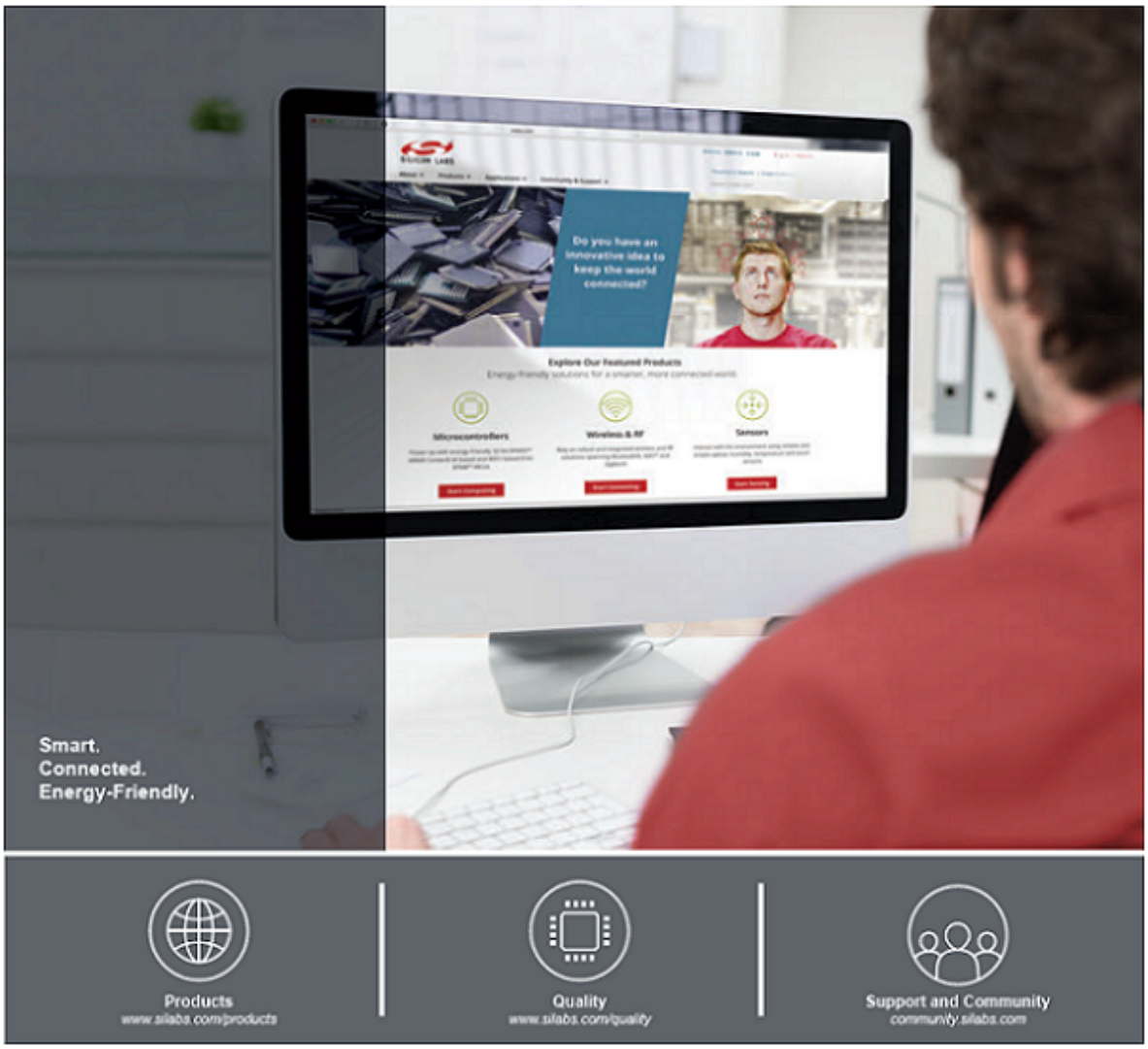
Qualification Data

N/A

Table 3.8. Absolute Maximum Ratings[1]

Parameter	Symbol	Min	Max	Unit
Storage Temperature[2]	T_{STG}	–65	+150	°C
Ambient Temperature under Bias	T_A	–40	+125	°C
Junction Temperature	T_J	—	+150	°C
Input-side Supply Voltage	VDDI	–0.6	6.0	V
Driver-side Supply Voltage	VDDA, VDDB	–0.6	30	V
Voltage on any Pin with respect to Ground	V_{IO}	–0.5	VDD + 0.5	V
Output voltage to GND, repeat spike of –2 V for 200 ns, 200 kHz	VOA to GNDA, VOB to GNDB	–2	VDDA/B + 0.5	V



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