



# 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

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  
SI8230BB-D-IS1R  
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  
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SI8231AB-D-IS1R  
SI8231AB-D-ISR  
SI8231AD-D-IS

SI8231AD-D-IS3  
SI8231AD-D-IS3R  
SI8231AD-D-ISR  
SI8231BB-D-IS  
SI8231BB-D-IS1  
SI8231BB-D-IS1R  
SI8231BB-D-ISR  
SI8231BD-D-IS  
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SI8235BD-D-YS0  
SI8235BD-D-YS0R  
SI8235BD-D-YSR  
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SI8237AD-D-IS  
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SI8237AD-D-ISR  
SI8237BB-D-IS1

SI8237BB-D-IS1R  
SI8237BD-D-IS  
SI8237BD-D-IS3  
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SI8237BD-D-ISR  
SI8238AB-D-IS1  
SI8238AB-D-IS1R  
SI8238AD-D-IS  
SI8238AD-D-IS3  
SI8238AD-D-IS3R  
SI8238AD-D-ISR  
SI8238BB-AS1  
SI8238BB-AS1R  
SI8238BB-D-IS1  
SI8238BB-D-IS1R  
SI8238BD-AS  
SI8238BD-ASR  
SI8238BD-D-IS  
SI8238BD-D-IS3  
SI8238BD-D-IS3R  
SI8238BD-D-ISR

**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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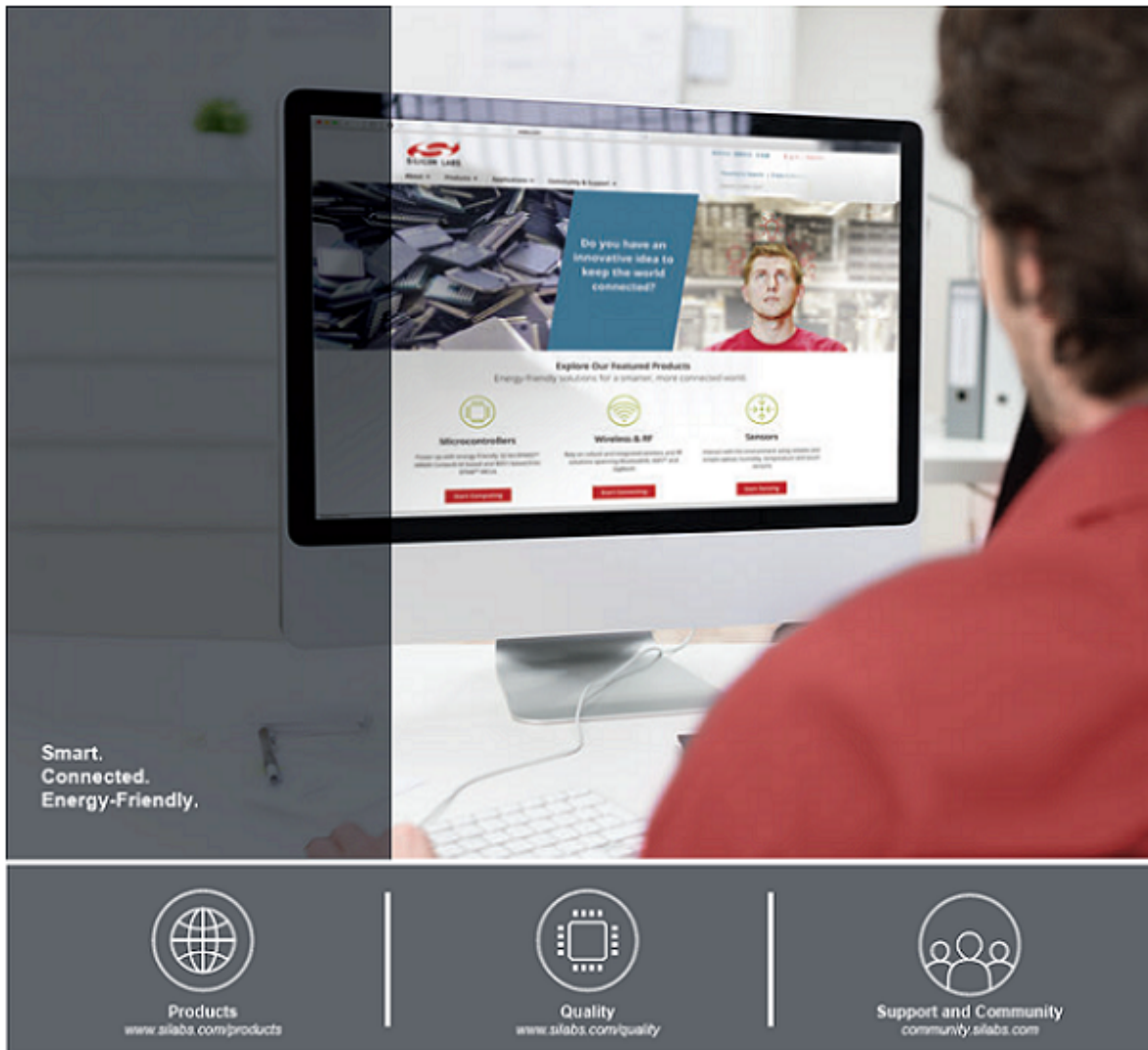
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### Qualification Data

N/A

Table 3.8. Absolute Maximum Ratings<sup>1</sup>

Parameter	Symbol	Min	Max	Unit
Storage Temperature <sup>2</sup>	T <sub>STG</sub>	-65	+150	°C
Ambient Temperature under Bias	T <sub>A</sub>	-40	+125	°C
Junction Temperature	T <sub>J</sub>	—	+150	°C
Input-side Supply Voltage	V <sub>DDI</sub>	-0.6	6.0	V
Driver-side Supply Voltage	V <sub>DDA</sub> , V <sub>DDB</sub>	-0.6	30	V
Voltage on any Pin with respect to Ground	V <sub>IO</sub>	-0.5	V <sub>DD</sub> + 0.5	V
Output voltage to GND, repeat spike of -2 V for 200 ns, 200 kHz	V <sub>OA</sub> to G <sub>NDA</sub> , V <sub>OB</sub> to G <sub>NDB</sub>	-2	V <sub>DDAB</sub> + 0.5	V



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