



**12500 TI Boulevard, MS 8640, Dallas, Texas 75243**

**PCN# 20240226002.1  
Datasheet for BQ25628E  
Change Notification**

**Date:** February 27, 2024  
**To:** MOUSER PCN

Dear Customer:

This is a notice of change to a product data sheet for a device that is currently offered by Texas Instruments. The details of this change are on the following pages.

We request you acknowledge receipt of this notification within **30** days of the date of this notice. Lack of acknowledgement of this notice within 30 days constitutes acceptance and approval of this change. If samples or additional data are required, requests must be received within **30 days** of this notification.

The proposed first ship date is indicated on page 3 of this notification, unless customer agreement has been reached on an earlier implementation of the change.

This notice does not change the end-of-life status of any product. Should product affected be on a previously issued product withdrawal/discontinuance notice, this notification does not extend the life of that product or change the life time buy offering/discontinuance plan.

For questions regarding this notice, contact your local Field Sales Representative or the Change Management team.

Sincerely,  
Change Management Team  
SC Business Services


## Data Sheet Change Attachments

### Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, you have recently purchased these devices. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
BQ25628ERYKR	NULL

Technical details of this Product Change follow on the next page(s).

<b>PCN Number:</b>	20240226002.1		<b>PCN Date:</b>	February 27, 2024																																	
<b>Title:</b>	Datasheet for BQ25628E																																				
<b>Customer Contact:</b>	Change Management			<b>Dept:</b>	Quality Services																																
<b>Proposed 1<sup>st</sup> Ship Date:</b>	May 26, 2024																																				
<b>Change Type:</b>																																					
<input type="checkbox"/>	Assembly Site	<input type="checkbox"/>	Design	<input type="checkbox"/>	Wafer Bump Site																																
<input type="checkbox"/>	Assembly Process	<input checked="" type="checkbox"/>	Data Sheet	<input type="checkbox"/>	Wafer Bump Material																																
<input type="checkbox"/>	Assembly Materials	<input type="checkbox"/>	Part number change	<input type="checkbox"/>	Wafer Bump Process																																
<input type="checkbox"/>	Mechanical Specification	<input type="checkbox"/>	Test Site	<input type="checkbox"/>	Wafer Fab Site																																
<input type="checkbox"/>	Packing/Shipping/Labeling	<input type="checkbox"/>	Test Process	<input type="checkbox"/>	Wafer Fab Materials																																
		<input type="checkbox"/>		<input type="checkbox"/>	Wafer Fab Process																																
<b>Notification Details</b>																																					
<b>Description of Change:</b>																																					
<p>Texas Instruments Incorporated is announcing an information only notification.  The product datasheet(s) is being updated as summarized below.</p>																																					
<div style="display: flex; justify-content: space-between; align-items: center;"> <div>  <b>TEXAS INSTRUMENTS</b> </div> <div style="text-align: right;"> <b>BQ25628E</b>  <small>SLUSFA4B – JUNE 2023 – REVISED FEBRUARY 2024</small> </div> </div>																																					
<table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;"><b>Changes from Revision A (January 2024) to Revision B (February 2024)</b></th> <th style="text-align: right;"><b>Page</b></th> </tr> </thead> <tbody> <tr><td>• Added IEC 62368-1 CB Certification.....</td><td style="text-align: right;">1</td></tr> <tr><td>• Changed T<sub>TOP_OFF</sub> Typical and Maximum Limit.....</td><td style="text-align: right;">15</td></tr> <tr><td>• Changed T<sub>SAFETY_TRKCHG</sub> Typical and Maximum Limit.....</td><td style="text-align: right;">15</td></tr> <tr><td>• Changed T<sub>SAFETY_PRECHG</sub> Typical and Maximum Limit.....</td><td style="text-align: right;">15</td></tr> <tr><td>• Changed T<sub>SAFETY</sub> Typical and Maximum Limit.....</td><td style="text-align: right;">15</td></tr> <tr><td>• Changed T<sub>BATFET_DLY</sub> Typical Value.....</td><td style="text-align: right;">15</td></tr> <tr><td>• Changed T<sub>SM_EXIT</sub> Typical and Maximum Limit.....</td><td style="text-align: right;">15</td></tr> <tr><td>• Changed T<sub>QON_RST</sub> Typical and Maximum Limit.....</td><td style="text-align: right;">15</td></tr> <tr><td>• Changed T<sub>BATFET_RST</sub> Typical Value.....</td><td style="text-align: right;">15</td></tr> <tr><td>• Changed T<sub>LP_WDT</sub> Typical Value.....</td><td style="text-align: right;">15</td></tr> <tr><td>• Changed T<sub>WDT</sub> Typical Value.....</td><td style="text-align: right;">15</td></tr> <tr><td>• Changed recommended values of RT1 and RT2 in <a href="#">Section 8.3.5.4.2</a> .....</td><td style="text-align: right;">23</td></tr> <tr><td>• Added I<sup>2</sup>C timing requirements for fast mode and fast mode plus in <a href="#">Section 8.5.1</a>.....</td><td style="text-align: right;">32</td></tr> <tr><td>• Changed TOPOFF_TMR values in Charge_Control_0 Register Description, PRECHG_TMR and CHG_TMR values in Charge_Timer_Control Register Description, and WATCHDOG values in Charger_Control_1 Register Description.....</td><td style="text-align: right;">35</td></tr> <tr><td>• Updated behavior of IBAT_ADC in IBAT_ADC Register Description.....</td><td style="text-align: right;">35</td></tr> </tbody> </table>						<b>Changes from Revision A (January 2024) to Revision B (February 2024)</b>	<b>Page</b>	• Added IEC 62368-1 CB Certification.....	1	• Changed T <sub>TOP_OFF</sub> Typical and Maximum Limit.....	15	• Changed T <sub>SAFETY_TRKCHG</sub> Typical and Maximum Limit.....	15	• Changed T <sub>SAFETY_PRECHG</sub> Typical and Maximum Limit.....	15	• Changed T <sub>SAFETY</sub> Typical and Maximum Limit.....	15	• Changed T <sub>BATFET_DLY</sub> Typical Value.....	15	• Changed T <sub>SM_EXIT</sub> Typical and Maximum Limit.....	15	• Changed T <sub>QON_RST</sub> Typical and Maximum Limit.....	15	• Changed T <sub>BATFET_RST</sub> Typical Value.....	15	• Changed T <sub>LP_WDT</sub> Typical Value.....	15	• Changed T <sub>WDT</sub> Typical Value.....	15	• Changed recommended values of RT1 and RT2 in <a href="#">Section 8.3.5.4.2</a> .....	23	• Added I <sup>2</sup> C timing requirements for fast mode and fast mode plus in <a href="#">Section 8.5.1</a> .....	32	• Changed TOPOFF_TMR values in Charge_Control_0 Register Description, PRECHG_TMR and CHG_TMR values in Charge_Timer_Control Register Description, and WATCHDOG values in Charger_Control_1 Register Description.....	35	• Updated behavior of IBAT_ADC in IBAT_ADC Register Description.....	35
<b>Changes from Revision A (January 2024) to Revision B (February 2024)</b>	<b>Page</b>																																				
• Added IEC 62368-1 CB Certification.....	1																																				
• Changed T <sub>TOP_OFF</sub> Typical and Maximum Limit.....	15																																				
• Changed T <sub>SAFETY_TRKCHG</sub> Typical and Maximum Limit.....	15																																				
• Changed T <sub>SAFETY_PRECHG</sub> Typical and Maximum Limit.....	15																																				
• Changed T <sub>SAFETY</sub> Typical and Maximum Limit.....	15																																				
• Changed T <sub>BATFET_DLY</sub> Typical Value.....	15																																				
• Changed T <sub>SM_EXIT</sub> Typical and Maximum Limit.....	15																																				
• Changed T <sub>QON_RST</sub> Typical and Maximum Limit.....	15																																				
• Changed T <sub>BATFET_RST</sub> Typical Value.....	15																																				
• Changed T <sub>LP_WDT</sub> Typical Value.....	15																																				
• Changed T <sub>WDT</sub> Typical Value.....	15																																				
• Changed recommended values of RT1 and RT2 in <a href="#">Section 8.3.5.4.2</a> .....	23																																				
• Added I <sup>2</sup> C timing requirements for fast mode and fast mode plus in <a href="#">Section 8.5.1</a> .....	32																																				
• Changed TOPOFF_TMR values in Charge_Control_0 Register Description, PRECHG_TMR and CHG_TMR values in Charge_Timer_Control Register Description, and WATCHDOG values in Charger_Control_1 Register Description.....	35																																				
• Updated behavior of IBAT_ADC in IBAT_ADC Register Description.....	35																																				
<p>The datasheet number will be changing.</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 40%;">Device Family</td> <td style="width: 30%;">Change From:</td> <td style="width: 30%;">Change To:</td> </tr> <tr> <td>BQ25628E</td> <td>SLUSFA4A</td> <td>SLUSFA4B</td> </tr> </table>						Device Family	Change From:	Change To:	BQ25628E	SLUSFA4A	SLUSFA4B																										
Device Family	Change From:	Change To:																																			
BQ25628E	SLUSFA4A	SLUSFA4B																																			
<p>These changes may be reviewed at the datasheet links provided.  <a href="http://www.ti.com/product/BQ25628E">http://www.ti.com/product/BQ25628E</a></p>																																					
<b>Reason for Change:</b>																																					
To accurately reflect device characteristics.																																					

<b>Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):</b>			
Electrical specification performance changes as indicated above.			
<b>Changes to product identification resulting from this PCN:</b>			
None.			
<b>Product Affected:</b>			
BQ25628ERYKR			

For questions regarding this notice, e-mails can be sent to the Change Management team or your local Field Sales Representative.

## **IMPORTANT NOTICE AND DISCLAIMER**

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to TI's Terms of Sale ([www.ti.com/legal/termsofsale.html](http://www.ti.com/legal/termsofsale.html)) or other applicable terms available either on [ti.com](http://ti.com) or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.